

Serial Number: 09/178,963

CRF Processing Date: \_\_\_\_\_  
Edited by: \_\_\_\_\_  
Verified by: \_\_\_\_\_ (STIC sta

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_

Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_

Inserted mandatory headings, specifically: \_\_\_\_\_

Corrected an obvious error in the response, specifically: \_\_\_\_\_

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_

Other: *Corrected misaligned amino acid numbering in left margin of sequence #3.*

ENTERED

RECEIVED

JUN 12 2001

TECH CENTER 1600/2900

\*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/30/2001  
TIME: 12:13:43

Input Set : A:\Cpg.pto  
Output Set: C:\CRF3\05302001\I778963.raw

4 <110> APPLICANT: NEELAM, Beena et al  
6 <120> TITLE OF INVENTION: ISOLATED HUMAN RAS-LIKE PROTEINS,  
7 NUCLEIC ACID MOLECULES ENCODING THESE HUMAN RAS-LIKE  
8 PROTEINS, AND USES THEREOF  
10 <130> FILE REFERENCE: CL001112  
12 <140> CURRENT APPLICATION NUMBER: 09/778,963  
13 <141> CURRENT FILING DATE: 2001-02-08  
15 <160> NUMBER OF SEQ ID NOS: 5  
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 3082  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Human  
24 <400> SEQUENCE: 1  
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26 gaggatcccc gcgcagtgc cccggagcca ccacagactc tggaggagtc ggcggctgga 120  
27 gcagcaggca gctcccccga gctcccgccg cttccaggca gctctctgag ccgtgccaga 180  
28 gccccggccc gccatccccca gccccggagcc atgatgaaga ctttgcggcag cgggaactgc 240  
29 acgctcagtgc tgcccgccaa aaactcatac cgcattgtgg tgctgggtgc ctctcggtg 300  
30 gccaagagct ccatcggtc tcgccttcctc aatggccgct ttgaggacca gtacacaccc 360  
31 accatcgagg acttccacccg taaggatatac aacatccgcg ggcacatgtc ccagctcgac 420  
32 atcctggata cctctggcaa ccaccccttc cccggccatgc gcaggctgtc catcctcaca 480  
33 ggggatgtct tcacatcggt gttcagcctg gataaccggg agtccttcga tgaggtcaag 540  
34 cgccttcaga agcagatcct ggaggtcaag tcctgcctga agaacaagac caaggaggcg 600  
35 gcgagactgc ccattgtcat ctgtggcaac aagaacgacc acggcgagct gtgcgcagg 660  
36 gtgcacccacca ccggggccga gctgtgggt tcgggcacg agaactccgc ctacttcgag 720  
37 gtgtcgccca agaagaacac caacgtggac gagatgttct acgtgtctt cagcatggcc 780  
38 aagctgccac acgagatgag ccccgccctg catcgcaaga tctccgtgca gtacgggtac 840  
39 gccttcacc ccaggccctt ctgcattgcgc cgcgtcaagg agatggacgc ctatggcatg 900  
40 gtctcgccct tcgccccccg ccccaagcgtc aacagtgacc tcaagtacat caaggccaag 960  
41 gtccatcggtt aaggccaggc ccgtgagagg gacaagtgc ccatccagtgc agcgaggat 1020  
42 gctggggccgg ggcttggcca gtgccttcag ggagggtggcc ccagatgccc actgtgcgc 1080  
43 tctccccacc gagggccccgg cagcgttctt gttcacagac cttaggcacc agactggagg 1140  
44 ccccccggcg ctggccctccg cacattcggtc tcgccttcata cagcttcctt gagtccgtt 1200  
45 gtccacagct ctttgggtgt ttcatctctt ctgtggggagg acacatctt gcagcctcaa 1260  
46 gagttaggca gagactcaag ttacacccctt ctctccctgg gtttggaaatgatgtgc 1320  
47 cagaggggtg aggattgtcg cgtcatatgg agcctcctgg gacaaggcctc aggatgaaaa 1380  
48 ggacacagaa ggccagatga gaaaggcttc ctcttcctg gcataacacc cagcttgggt 1440  
49 tgggtggcag ctgggagaac ttcttcctca gccctgcaac tcttacgctc tggttcagct 1500  
50 gcctctgcac cccctccac ccccaagcaca cacacaagtt ggcggccaggc tgccctgac 1560  
51 attgagccag tggactctgt gtctgaagagg ggcgtggcca cacctccttag accacgcccc 1620  
52 ccacttagac cacgcccacc tcctgaccgc gttcctcagc ctccctcttcc aggtccctcc 1680  
53 gcccgacagt tgtgtttgt tgtgggtgca gctgttttcg tgtcatgtat agtagtagaa 1740  
54 atggaaatca ttgtactgtaa aagccttagt gactccctcc ttggccaggc cctcaccagg 1800  
55 ttcatgttca cggccctccac cccggacgcc ttcccttcctt gctcccaaac agggttccg 1860  
56 tggcctgttt gcagctagac attgacccctt gccattggac tccacgggtt acagacaatt 1920  
57 gcacaagcgt ggggtggca ggccaggact gctttttt aatgctccca tttcacagag 1980

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/30/2001  
TIME: 12:13:43

Input Set : A:\Cpg.pto  
Output Set: C:\CRF3\05302001\I778963.raw

58 gataccaccc agactcggag gggacacgat gaggcaccagg ccccacctt gtcccctagc 2040  
 59 aaattcaggg tacagctcca cctagaacca ggctgcctc tactgtgctc gttcctcaag 2100  
 60 catttattaa gcacctactg ggtgctgggt tcactgtgtc ctaggaaacc aagagggtcc 2160  
 61 ccagtccctgg cctctgcccc cccctgctgc cccaccaccc tctgcacaca cagcgggtggg 2220  
 62 gaggcgggga ggagcagctg ggacccagaa ctgagcctgg gagggatccg acagaaaagc 2280  
 63 tcagggcggg tcttctcctt gtgcccgggaa ttgggctatg ctgggtacca ccatgtactc 2340  
 64 aggcattgtg ggttttgaac ccataaaacca aaggcccttgc tcatcagctc ttaacaagta 2400  
 65 tattttgtat tttaatctct ctaaacatata tgaagttta gggccctaag gaaccttagt 2460  
 66 gatcttctat tgggtcttgc tgaggtttag agagggtaag taacttcctc caggtcacac 2520  
 67 agcaagtctg tgggtggcag aagcaagcta ggcgctggca ttcaatcactat accacgatgt 2580  
 68 gctccctctc ttgatgcttgc gcccctgggg ctttcaggc tttgggacat cttgtcctca 2640  
 69 accctctccc tagatcagtc tgggtggc tctgttagata ttgtgtacac catgcccattg 2700  
 70 tatatacaag tacacacaga tgggtttttt gatgtacaca tgctccagcc ccagctctgc 2760  
 71 atacctgcac ctgcacccca gccttggccc ctgcctgcgt ctgtgctcaa agcagcagct 2820  
 72 ccaaccctgc ctctgtcccc ttccccaccc actgcctgag cttctgagc agaccaggta 2880  
 73 ccttggctgc accgggtgtgt ggcccgctct caccaggca cagccccggcc accatggatc 2940  
 74 tccgtgtaca ctatcaataa aagtgggtt gttacaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 3000  
 75 aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa 3060  
 76 aaaaaaaaaaa aaaaaaaaaaa aa 3082  
 78 <210> SEQ ID NO: 2  
 79 <211> LENGTH: 266  
 80 <212> TYPE: PRT  
 81 <213> ORGANISM: Human  
 83 <400> SEQUENCE: 2  
 84 Met Met Lys Thr Leu Ser Ser Gly Asn Cys Thr Leu Ser Val Pro Ala  
 85 1 5 10 15  
 86 Lys Asn Ser Tyr Arg Met Val Val Leu Gly Ala Ser Arg Val Gly Lys  
 87 20 25 30  
 88 Ser Ser Ile Val Ser Arg Phe Leu Asn Gly Arg Phe Glu Asp Gln Tyr  
 89 35 40 45  
 90 Thr Pro Thr Ile Glu Asp Phe His Arg Lys Val Tyr Asn Ile Arg Gly  
 91 50 55 60  
 92 Asp Met Tyr Gln Leu Asp Ile Leu Asp Thr Ser Gly Asn His Pro Phe  
 93 65 70 75 80  
 94 Pro Ala Met Arg Arg Leu Ser Ile Leu Thr Gly Asp Val Phe Ile Leu  
 95 85 90 95  
 96 Val Phe Ser Leu Asp Asn Arg Glu Ser Phe Asp Glu Val Lys Arg Leu  
 97 100 105 110  
 98 Gln Lys Gln Ile Leu Glu Val Lys Ser Cys Leu Lys Asn Lys Thr Lys  
 99 115 120 125  
 100 Glu Ala Ala Glu Leu Pro Met Val Ile Cys Gly Asn Lys Asn Asp His  
 101 130 135 140  
 102 Gly Glu Leu Cys Arg Gln Val Pro Thr Thr Glu Ala Glu Leu Leu Val  
 103 145 150 155 160  
 104 Ser Gly Asp Glu Asn Ser Ala Tyr Phe Glu Val Ser Ala Lys Lys Asn  
 105 165 170 175  
 106 Thr Asn Val Asp Glu Met Phe Tyr Val Leu Phe Ser Met Ala Lys Leu  
 107 180 185 190  
 108 Pro His Glu Met Ser Pro Ala Leu His Arg Lys Ile Ser Val Gln Tyr

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Input Set : A:\Cpg.pto  
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109 195 200 205  
 110 Gly Asp Ala Phe His Pro Arg Pro Phe Cys Met Arg Arg Val Lys Glu  
 111 210 215 220  
 112 Met Asp Ala Tyr Gly Met Val Ser Pro Phe Ala Arg Arg Pro Ser Val  
 113 225 230 235 240  
 114 Asn Ser Asp Leu Lys Tyr Ile Lys Ala Lys Val Leu Arg Glu Gly Gln  
 115 245 250 255  
 116 Ala Arg Glu Arg Asp Lys Cys Thr Ile Gln  
 117 260 265  
 120 <210> SEQ ID NO: 3  
 121 <211> LENGTH: 11221  
 122 <212> TYPE: PRT  
 123 <213> ORGANISM: Human  
 125 <400> SEQUENCE: 3  
 126 Cys Thr Cys Thr Cys Thr Gly Ala Cys Thr Cys Thr Thr Gly Cys  
 127 1 5 10 15  
 128 Cys Thr Cys Cys Thr Cys Thr Cys Thr Gly Ala Cys Thr Cys Cys Cys  
 129 20 25 30  
 130 Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Thr  
 131 35 40 45  
 132 Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Gly  
 133 50 55 60  
 134 Thr Cys Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys  
 135 65 70 75 80  
 136 Cys Cys Cys Thr Cys Thr Cys Thr Gly Thr Cys Thr Cys Ala Cys Thr  
 137 85 90 95  
 138 Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Ala Cys  
 139 100 105 110  
 140 Thr Cys Thr Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr  
 141 115 120 125  
 142 Cys Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys  
 143 130 135 140  
 144 Thr Cys Thr Cys Thr Cys Thr Gly Ala Thr Thr Cys Cys Cys Thr Gly  
 145 145 150 155 160  
 146 Cys Cys Thr Cys Thr Thr Thr Gly Ala Cys Cys Cys Thr Cys Thr Gly  
 147 165 170 175  
 148 Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Thr Gly Ala Cys Thr  
 149 180 185 190  
 150 Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Cys  
 151 195 200 205  
 152 Cys Gly Ala Thr Thr Cys Thr Cys Thr Gly Cys Gly Thr Cys Thr Thr  
 153 210 215 220  
 154 Thr Gly Ala Cys Thr Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr  
 155 225 230 235 240  
 156 Cys Thr Cys Thr Cys Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Ala  
 157 245 250 255  
 158 Ala Gly Cys Thr Cys Ala Thr Thr Cys Ala Gly Thr Cys Ala Thr Thr  
 159 260 265 270  
 160 Gly Cys Thr Ala Thr Cys Ala Ala Cys Thr Cys Gly Thr Cys Thr Gly

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DATE: 05/30/2001  
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Input Set : A:\Cpg.pto  
Output Set: C:\CRF3\05302001\I778963.raw

161	275	280	285
162	Thr Ala Cys Cys Ala Ala Gly Cys Thr Cys Thr Ala Gly Gly Cys Thr		
163	290	295	300
164	Gly Gly Ala Gly Gly Cys Thr Gly Gly Cys Ala Gly Gly Cys		
165	305	310	315
166	320		
167	Ala Ala Thr Gly Ala Thr Gly Gly Ala Gly Ala Cys Ala Ala Ala Thr		
168	325	330	335
169	Ala Cys Thr Gly Thr Cys Cys Cys Thr Gly Gly Ala Gly Cys Thr		
170	340	345	350
171	Thr Cys Thr Gly Gly Cys Cys Cys Thr Thr Thr Cys Cys Cys Ala		
172	355	360	365
173	Thr Cys Cys Thr Gly Thr Thr Ala Gly Ala Cys Ala Gly Ala Ala		
174	370	375	380
175	Gly Thr Gly Ala Cys Cys Gly Cys Cys Ala Gly Cys Ala Gly Ala Gly		
176	385	390	395
177	400		
178	Thr Cys Ala Ala Gly Cys Thr Gly Thr Cys Thr Gly Cys Ala Gly Ala		
179	405	410	415
180	Ala Gly Gly Ala Cys Thr Thr Gly Gly Gly Ala Gly Gly Gly Gly		
181	420	425	430
182	Gly Cys Thr Gly Thr Cys Ala Thr Gly Gly Gly Gly Thr Ala Gly Gly		
183	435	440	445
184	Gly Cys Thr Thr Cys Thr Thr Cys Cys Cys Cys Cys Ala Thr		
185	450	455	460
186	Cys Thr Cys Thr Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys		
187	465	470	475
188	480		
189	Gly Gly Cys Thr Gly Gly Cys Thr Gly Ala Gly Ala Cys Ala Gly Cys		
190	485	490	495
191	Cys Cys Cys Gly Gly Cys Ala Gly Ala Gly Ala Cys Thr Gly Ala Gly		
192	500	505	510
193	510		
194	Ala Ala Gly Gly Cys Thr Cys Cys Cys Thr Gly Cys Thr Gly Thr		
195	515	520	525
196	Gly Gly Thr Cys Thr Gly Gly Cys Ala Gly Cys Cys Cys Cys Cys Thr		
197	530	535	540
198	540		
199	Cys Thr Cys Cys Ala Cys Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr		
200	545	550	555
201	560		
202	Cys Thr Cys Cys Ala Thr Gly Gly Gly Ala Gly Gly Gly Cys Cys		
203	565	570	575
204	Cys Cys Cys Thr Ala Gly Gly Gly Ala Gly Gly Gly Cys Cys		
205	580	585	590
206	600		
207	Cys Thr Gly Gly Cys Cys Ala Gly Thr Cys Ala Gly Gly Thr Gly		
208	605		
209	620		
209	625	630	635
209	640		
209	645	650	655
209	655		
209	660	665	670

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/30/2001

TIME: 12:13:43

Input Set : A:\Cpg.pto  
 Output Set: C:\CRF3\05302001\I778963.raw

210 Gly Ala Ala Gly Gly Thr Cys Cys Ala Gly Ala Gly Thr Gly Gly  
 211 675 680 685  
 212 Gly Gly Cys Thr Thr Cys Ala Gly Gly Cys Ala Ala Ala Cys Cys Cys  
 213 690 695 700  
 214 Ala Ala Ala Gly Ala Cys Ala Gly Ala Gly Cys Cys Cys Thr Thr  
 215 705 710 715 720  
 216 Gly Cys Cys Ala Thr Thr Gly Ala Thr Gly Ala Ala Thr Gly Cys  
 217 725 730 735  
 218 Ala Cys Ala Gly Ala Cys Cys Cys Thr Thr Thr Ala Thr Thr Gly Ala  
 219 740 745 750  
 220 Gly Cys Cys Cys Cys Thr Gly Cys Thr Cys Thr Gly Thr Thr Cys Ala  
 221 755 760 765  
 222 Thr Gly Gly Cys Ala Thr Gly Gly Cys Ala Gly Thr Thr Thr Thr Gly  
 223 770 775 780  
 224 Thr Gly Gly Gly Ala Thr Ala Ala Ala Thr Cys Ala Ala Ala Gly  
 225 785 790 795 800  
 226 Ala Cys Ala Gly Cys Thr Thr Thr Ala Gly Gly Thr Gly Gly Ala  
 227 805 810 815  
 228 Gly Cys Thr Gly Gly Thr Gly Gly Gly Gly Ala Thr Gly Thr  
 229 820 825 830  
 230 Gly Gly Gly Gly Thr Cys Thr Thr Ala Gly Gly Cys Thr Thr Gly  
 231 835 840 845  
 232 Ala Ala Cys Thr Ala Cys Thr Ala Cys Cys Cys Ala Gly Cys Cys Thr  
 233 850 855 860  
 234 Cys Cys Thr Thr Gly Thr Thr Ala Ala Cys Cys Ala Ala Gly Thr  
 235 865 870 875 880  
 236 Ala Gly Cys Thr Ala Gly Thr Cys Ala Cys Gly Thr Ala Gly Cys Cys  
 237 885 890 895  
 238 Thr Thr Cys Thr Gly Ala Gly Cys Thr Cys Gly Gly Gly Gly Cys Ala  
 239 900 905 910  
 240 Gly Ala Cys Cys Ala Cys Cys Thr Gly Gly Gly Ala Thr Cys Ala Ala  
 241 915 920 925  
 242 Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys Thr Gly Cys Thr Gly Gly  
 243 930 935 940  
 244 Thr Thr Ala Cys Thr Gly Gly Cys Thr Gly Thr Gly Cys Ala Ala Cys  
 245 945 950 955 960  
 246 Thr Gly Thr Ala Ala Gly Cys Ala Ala Gly Thr Ala Ala Thr Thr Thr  
 247 965 970 975  
 248 Ala Ala Cys Cys Thr Cys Thr Cys Thr Gly Thr Gly Cys Cys Thr Cys  
 249 980 985 990  
 250 Ala Gly Thr Thr Cys Cys Thr Cys Ala Thr Cys Thr Gly Thr Ala  
 251 995 1000 1005  
 252 Ala Ala Thr Thr Gly Gly Ala Gly Ala Ala Thr Ala Ala Cys Ala Cys  
 253 1010 1015 1020  
 254 Cys Ala Cys Cys Thr Gly Cys Thr Thr Cys Thr Gly Gly Gly Gly  
 255 1025 1030 1035 1040  
 256 Thr Thr Ala Thr Gly Ala Ala Gly Gly Ala Gly Ala Ala Ala Thr  
 257 1045 1050 1055  
 258 Ala Gly Gly Thr Thr Ala Ala Cys Ala Thr Gly Thr Gly Thr Gly Cys

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/778,963

DATE: 05/30/2001

TIME: 12:13:44

Input Set : A:\Cpg.pto

Output Set: C:\CRF3\05302001\I778963.raw

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

Does Not Comply  
Corrected Diskette Needed  
27-29  
See pp.

4 <110> APPLICANT: NEELAM, Beena et al  
6 <120> TITLE OF INVENTION: ISOLATED HUMAN RAS-LIKE PROTEINS,  
7 NUCLEIC ACID MOLECULES ENCODING THESE HUMAN RAS-LIKE  
8 PROTEINS, AND USES THEREOF  
10 <130> FILE REFERENCE: CL001112  
12 <140> CURRENT APPLICATION NUMBER: 09/778,963  
13 <141> CURRENT FILING DATE: 2001-02-08  
15 <160> NUMBER OF SEQ ID NOS: 5  
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0

#### ERRORED SEQUENCES

120 <210> SEQ ID NO: 3  
121 <211> LENGTH: 11221  
122 <212> TYPE: PRT  
123 <213> ORGANISM: Human  
125 <400> SEQUENCE: 3  
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127 1 5 10 15  
128 Cys Thr Cys Cys Thr Cys Thr Cys Thr Gly Ala Cys Thr Cys Cys Cys  
129 20 25 30  
130 Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Gly Thr  
131 35 40 45  
132 Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Gly  
133 50 55 60  
134 Thr Cys Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys  
135 65 70 75 80  
136 Cys Cys Cys Thr Cys Thr Cys Thr Gly Thr Cys Thr Cys Ala Cys Thr  
137 85 90 95  
138 Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Ala Cys  
139 100 105 110  
140 Thr Cys Thr Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr  
141 115 120 125  
142 Cys Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys  
143 130 135 140  
144 Thr Cys Thr Cys Thr Cys Thr Gly Ala Thr Thr Cys Cys Cys Thr Gly  
145 145 150 155 160  
146 Cys Cys Thr Cys Thr Thr Gly Ala Cys Cys Cys Thr Cys Thr Gly  
147 165 170 175  
148 Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Thr Thr Gly Ala Cys Thr  
149 180 185 190  
150 Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr Cys Thr Cys Thr Cys  
151 195 200 205  
152 Cys Gly Ala Thr Thr Cys Thr Cys Thr Gly Cys Gly Thr Cys Thr Thr  
153 210 215 220  
154 Thr Gly Ala Cys Thr Cys Cys Cys Thr Gly Cys Cys Thr Cys Cys Thr

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

155	225	230	235	240												
156	Cys	Thr	Cys	Thr	Cys	Thr	Gly	Ala	Cys	Thr	Cys	Cys	Thr	Gly	Ala	
157				245		250									255	
158	Ala	Gly	Cys	Thr	Cys	Ala	Thr	Thr	Cys	Ala	Gly	Thr	Cys	Ala	Thr	Thr
159					260		265								270	
160	Gly	Cys	Thr	Ala	Thr	Cys	Ala	Ala	Cys	Thr	Cys	Gly	Thr	Cys	Thr	Gly
161						275		280							285	
162	Thr	Ala	Cys	Cys	Ala	Ala	Gly	Cys	Thr	Cys	Thr	Ala	Gly	Gly	Cys	Thr
163						290		295							300	
164	Gly	Gly	Ala	Gly	Gly	Cys	Thr	Gly	Gly	Gly	Cys	Ala	Gly	Gly	Gly	Cys
165	305						310			315					320	
166	Ala	Ala	Thr	Gly	Ala	Thr	Gly	Gly	Ala	Gly	Ala	Cys	Ala	Ala	Ala	Thr
167							325			330					335	
168	Ala	Cys	Thr	Gly	Thr	Cys	Cys	Thr	Gly	Gly	Gly	Ala	Gly	Cys	Thr	
169						340		345							350	
170	Thr	Cys	Thr	Gly	Gly	Cys	Cys	Cys	Thr	Thr	Thr	Cys	Cys	Cys	Ala	
171						355		360							365	
172	Thr	Cys	Cys	Thr	Gly	Thr	Thr	Thr	Ala	Gly	Ala	Cys	Ala	Gly	Ala	Ala
173						370		375							380	
174	Gly	Thr	Gly	Ala	Cys	Cys	Gly	Cys	Cys	Ala	Gly	Cys	Ala	Gly	Ala	Gly
175	385						390			395					400	
176	Thr	Cys	Ala	Ala	Gly	Cys	Thr	Gly	Thr	Cys	Thr	Gly	Cys	Ala	Gly	Ala
177							405			410					415	
178	Ala	Gly	Gly	Ala	Cys	Thr	Thr	Gly	Gly	Gly	Ala	Gly	Gly	Gly	Gly	
179							420			425					430	
180	Gly	Cys	Thr	Gly	Thr	Cys	Ala	Thr	Gly	Gly	Gly	Thr	Ala	Gly	Gly	
181							435			440					445	
182	Gly	Cys	Thr	Thr	Cys	Thr	Thr	Thr	Cys	Cys	Cys	Cys	Cys	Cys	Ala	Thr
183							450			455					460	
184	Cys	Thr	Cys	Thr	Gly	Cys	Thr	Gly	Ala	Ala	Gly	Gly	Cys	Cys	Cys	Ala
185	465						470			475					480	
186	Gly	Gly	Cys	Thr	Gly	Gly	Cys	Thr	Gly	Ala	Gly	Ala	Cys	Ala	Gly	Cys
187							485			490					495	
188	Cys	Cys	Cys	Gly	Gly	Cys	Ala	Gly	Ala	Gly	Ala	Cys	Thr	Gly	Ala	Gly
189							500			505					510	
190	Ala	Ala	Gly	Gly	Gly	Cys	Thr	Cys	Cys	Thr	Gly	Cys	Thr	Gly	Thr	
191							515			520					525	
192	Gly	Gly	Thr	Cys	Thr	Gly	Gly	Cys	Ala	Gly	Cys	Cys	Cys	Cys	Cys	Thr
193							530			535					540	
194	Cys	Thr	Cys	Cys	Ala	Cys	Cys	Thr	Cys	Cys	Thr	Cys	Thr	Cys	Thr	
195	545						550			555					560	
196	Cys	Thr	Cys	Ala	Thr	Thr	Cys	Cys	Thr	Gly	Cys	Cys	Thr	Cys	Cys	
197							565			570					575	
198	Cys	Ala	Cys	Ala	Cys	Gly	Thr	Ala	Thr	Gly	Cys	Cys	Cys	Thr	Gly	Gly
199							580			585					590	
200	Gly	Cys	Ala	Cys	Cys	Thr	Cys	Ala	Thr	Cys	Ala	Gly	Gly	Gly	Cys	Thr
201							595			600					605	
202	Gly	Cys	Cys	Cys	Thr	Ala	Gly	Gly	Gly	Ala	Gly	Gly	Gly	Cys	Cys	
203							610			615					620	

RAW SEQUENCE LISTING  
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DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

204 Cys Thr Cys Cys Thr Thr Gly Gly Cys Ala Cys Ala Gly Cys Cys Cys  
205 625 630 635 640  
206 Cys Thr Gly Gly Cys Cys Ala Gly Thr Cys Ala Gly Gly Thr Gly  
207 645 650 655  
208 Gly Thr Thr Gly Ala Gly Gly Cys Thr Gly Ala Gly Gly Ala Gly Ala  
209 660 665 670  
210 Gly Ala Ala Gly Gly Thr Cys Cys Cys Ala Gly Ala Gly Thr Gly Gly  
211 675 680 685  
212 Gly Gly Cys Thr Thr Cys Ala Gly Gly Cys Ala Ala Ala Cys Cys Cys  
213 690 695 700  
214 Ala Ala Ala Gly Ala Cys Ala Gly Ala Gly Cys Cys Cys Thr Thr Thr  
215 705 710 715 720  
216 Gly Cys Cys Ala Thr Thr Thr Gly Ala Thr Gly Ala Ala Thr Gly Cys  
217 725 730 735  
218 Ala Cys Ala Gly Ala Cys Cys Cys Thr Thr Thr Ala Thr Thr Gly Ala  
219 740 745 750  
220 Gly Cys Cys Cys Cys Thr Gly Cys Thr Cys Thr Gly Thr Thr Cys Ala  
221 755 760 765  
222 Thr Gly Gly Cys Ala Thr Gly Gly Cys Ala Gly Thr Thr Thr Thr Gly  
223 770 775 780  
224 Thr Gly Gly Ala Thr Ala Ala Ala Thr Thr Cys Ala Ala Ala Gly  
225 785 790 795 800  
226 Ala Cys Ala Gly Cys Thr Thr Thr Ala Gly Gly Thr Gly Gly Gly Ala  
227 805 810 815  
228 Gly Cys Thr Gly Gly Gly Thr Gly Gly Gly Gly Ala Thr Gly Thr  
229 820 825 830  
230 Gly Gly Gly Gly Thr Cys Thr Thr Ala Gly Gly Cys Thr Thr Gly  
231 835 840 845  
232 Ala Ala Cys Thr Ala Cys Thr Ala Cys Cys Cys Ala Gly Cys Cys Thr  
233 850 855 860  
234 Cys Cys Thr Thr Thr Gly Thr Thr Ala Ala Cys Cys Ala Ala Gly Thr  
235 865 870 875 880  
236 Ala Gly Cys Thr Ala Gly Thr Cys Ala Cys Gly Thr Ala Gly Cys Cys  
237 885 890 895  
238 Thr Thr Cys Thr Gly Ala Gly Cys Thr Cys Gly Gly Gly Gly Cys Ala  
239 900 905 910  
240 Gly Ala Cys Cys Ala Cys Cys Thr Gly Gly Gly Ala Thr Cys Ala Ala  
241 915 920 925  
242 Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Gly Cys Thr Gly Gly  
243 930 935 940  
244 Thr Thr Ala Cys Thr Gly Gly Cys Thr Gly Thr Gly Cys Ala Ala Cys  
245 945 950 955 960  
246 Thr Gly Thr Ala Ala Gly Cys Ala Ala Gly Thr Ala Ala Thr Thr Thr  
247 965 970 975  
248 Ala Ala Cys Cys Thr Cys Cys Thr Gly Thr Gly Cys Cys Thr Cys  
249 980 985 990  
250 Ala Gly Thr Thr Thr Cys Cys Thr Cys Ala Thr Cys Thr Gly Thr Ala  
251 995 1000 1005  
252 Ala Ala Thr Thr Gly Gly Ala Ala Ala Thr Ala Ala Cys Ala Cys

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

253	1010	1015	1020
254	Cys Ala Cys Cys Thr Gly Cys Thr Thr Cys Thr Gly Gly Gly		
255	1025	1030	1035
			1040
256	Thr Thr Ala Thr Gly Ala Ala Gly Gly Ala Gly Ala Ala Ala Thr		
257	1045	1050	1055
258	Ala Gly Gly Thr Thr Ala Ala Cys Ala Thr Gly Thr Gly Thr Gly Cys		
259	1060	1065	1070
260	Ala Gly Cys Ala Cys Thr Thr Ala Gly Ala Ala Cys Ala Cys Thr Cys		
261	1075	1080	1085
262	Thr Gly Gly Cys Ala Thr Ala Thr Thr Thr Ala Gly Cys Thr Gly		
263	1090	1095	1100
264	Cys Ala Ala Ala Ala Thr Gly Ala Ala Thr Gly Cys Cys Ala Gly Cys		
265	1105	1110	1115
			1120
266	Thr Ala Thr Gly Ala Thr Thr Ala Thr Thr Cys Thr Ala Thr Ala		
267	1125	1130	1135
268	Cys Thr Thr Ala Gly Thr Gly Cys Gly Gly Gly Cys Thr Thr Gly		
269	1140	1145	1150
270	Gly Cys Ala Cys Ala Cys Thr Gly Cys Ala Thr Gly Gly Gly Cys Thr		
271	1155	1160	1165
272	Cys Ala Ala Gly Thr Gly Gly Cys Ala Gly Cys Ala Gly Thr Thr Gly		
273	1170	1175	1180
274	Thr Cys Gly Thr Cys Cys Thr Thr Gly Thr Gly Gly Cys Thr Cys Cys		
275	1185	1190	1195
			1200
276	Ala Gly Gly Cys Cys Thr Gly Gly Gly Thr Cys Cys Gly Cys Cys		
277	1205	1210	1215
278	Gly Thr Gly Thr Gly Cys Thr Gly Ala Gly Cys Thr Gly Gly Cys Thr		
279	1220	1225	1230
280	Thr Ala Thr Thr Gly Thr Gly Cys Ala Cys Gly Thr Cys Cys Cys Thr		
281	1235	1240	1245
282	Thr Thr Gly Thr Gly Ala Thr Thr Cys Ala Thr Thr Cys Ala Thr Cys		
283	1250	1255	1260
284	Gly Ala Ala Gly Thr Cys Ala Cys Ala Thr Thr Ala Gly Thr Ala Gly		
285	1265	1270	1275
			1280
286	Cys Thr Thr Ala Gly Ala Ala Gly Thr Gly Ala Cys Cys Gly Thr Ala		
287	1285	1290	1295
288	Gly Thr Gly Gly Ala Gly Cys Ala Thr Thr Thr Ala Cys Gly Cys		
289	1300	1305	1310
290	Cys Ala Thr Gly Gly Ala Ala Ala Thr Thr Gly Gly Cys Ala Ala Thr		
291	1315	1320	1325
292	Ala Gly Gly Gly Cys Thr Thr Thr Ala Ala Cys Ala Ala Ala Gly		
293	1330	1335	1340
294	Gly Thr Ala Thr Thr Thr Gly Ala Gly Ala Gly Cys Cys Gly		
295	1345	1350	1355
			1360
296	Gly Thr Thr Thr Cys Cys Thr Gly Cys Ala Cys Ala Gly Ala Gly Gly		
297	1365	1370	1375
298	Cys Thr Gly Gly Thr Ala Gly Thr Thr Gly Gly Gly Cys Ala Gly Gly		
299	1380	1385	1390
300	Gly Thr Gly Ala Gly Cys Ala Gly Ala Thr Cys Cys Ala Gly Ala Thr		
301	1395	1400	1405

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

302 Gly Thr Gly Thr Gly Cys Cys Ala Gly Gly Ala Cys Thr Cys Gly  
 303 1410 1415 1420  
 304 Cys Ala Cys Gly Cys Ala Gly Gly Cys Ala Ala Thr Cys Thr Cys Thr  
 305 1425 1430 1435 1440  
 306 Cys Cys Ala Cys Cys Thr Cys Cys Ala Gly Thr Gly Gly Cys Cys Ala  
 307 1445 1450 1455  
 308 Thr Cys Thr Cys Ala Gly Ala Cys Cys Thr Thr Ala Gly Cys Thr Thr  
 309 1460 1465 1470  
 310 Cys Ala Thr Gly Ala Thr Ala Gly Cys Cys Ala Gly Gly Ala Ala Gly  
 311 1475 1480 1485  
 312 Cys Gly Ala Thr Gly Gly Thr Gly Thr Thr Gly Gly Ala Ala Ala Gly  
 313 1490 1495 1500  
 314 Cys Gly Cys Cys Thr Thr Gly Gly Gly Thr Cys Ala Ala Thr Gly Gly  
 315 1505 1510 1515 1520  
 316 Gly Cys Gly Ala Gly Gly Cys Ala Cys Thr Cys Ala Ala Gly Gly Ala  
 317 1525 1530 1535  
 318 Ala Ala Cys Cys Gly Ala Cys Thr Thr Gly Gly Gly Cys Ala Thr  
 319 1540 1545 1550  
 320 Cys Cys Thr Gly Gly Gly Thr Gly Gly Gly Ala Cys Cys Gly  
 321 1555 1560 1565  
 322 Ala Gly Thr Thr Thr Gly Gly Cys Ala Cys Ala Thr Ala Cys Ala  
 323 1570 1575 1580  
 324 Gly Cys Cys Cys Thr Thr Gly Thr Gly Thr Gly Ala Ala Thr Thr  
 325 1585 1590 1595 1600  
 326 Thr Ala Ala Ala Ala Cys Ala Gly Thr Gly Cys Cys Thr Thr Thr  
 327 1605 1610 1615  
 328 Thr Cys Cys Thr Cys Thr Ala Cys Ala Ala Gly Ala Thr Gly  
 329 1620 1625 1630  
 330 Cys Cys Cys Thr Thr Cys Gly Thr Cys Thr Gly Gly Gly Ala Thr  
 331 1635 1640 1645  
 332 Ala Cys Ala Gly Cys Cys Cys Cys Ala Cys Cys Cys Thr Cys Thr Gly  
 333 1650 1655 1660  
 334 Gly Gly Ala Thr Gly Cys Ala Gly Cys Cys Cys Cys Cys Ala Cys Thr  
 335 1665 1670 1675 1680  
 336 Thr Gly Cys Cys Cys Ala Cys Cys Cys Ala Gly Cys Cys Ala Thr Gly  
 337 1685 1690 1695  
 338 Cys Gly Cys Cys Thr Thr Gly Thr Gly Cys Ala Gly Thr Ala Thr Cys  
 339 1700 1705 1710  
 340 Cys Ala Ala Cys Cys Thr Gly Cys Ala Cys Ala Cys Cys Thr Gly  
 341 1715 1720 1725  
 342 Thr Gly Gly Cys Ala Gly Cys Cys Thr Gly Thr Gly Gly Ala Ala Gly  
 343 1730 1735 1740  
 344 Ala Cys Cys Gly Ala Gly Gly Gly Ala Thr Thr Gly Ala Thr Ala  
 345 1745 1750 1755 1760  
 346 Thr Thr Thr Cys Ala Gly Cys Ala Gly Gly Cys Cys Thr Gly Thr Gly  
 347 1765 1770 1775  
 348 Cys Cys Cys Ala Thr Thr Thr Gly Cys Ala Gly Thr Thr Cys Ala Gly  
 349 1780 1785 1790  
 350 Gly Gly Gly Cys Thr Gly Gly Ala Ala Ala Gly Cys Thr Cys Thr Cys

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

351 1795 1800 1805  
 352 Cys Thr Cys Thr Gly Gly Ala Gly Ala Gly Gly Gly Ala Gly Gly  
 353 1810 1815 1820  
 354 Gly Ala Thr Thr Cys Cys Thr Gly Cys Ala Ala Gly Gly Gly Thr Gly  
 355 1825 1830 1835 1840  
 356 Ala Gly Gly Ala Gly Ala Thr Cys Ala Gly Ala Gly Ala Gly Cys  
 357 1845 1850 1855  
 358 Cys Thr Thr Cys Ala Gly Ala Gly Ala Gly Cys Ala Gly Gly Thr Gly  
 359 1860 1865 1870  
 360 Gly Cys Ala Cys Thr Thr Gly Ala Gly Cys Cys Ala Gly Ala Cys Cys  
 361 1875 1880 1885  
 362 Cys Thr Gly Ala Ala Ala Cys Ala Thr Ala Ala Gly Gly Gly Gly Ala  
 363 1890 1895 1900  
 364 Ala Gly Ala Gly Gly Thr Gly Thr Thr Cys Thr Gly Cys Ala Gly  
 365 1905 1910 1915 1920  
 366 Ala Gly Gly Gly Thr Gly Gly Cys Ala Thr Gly Ala Gly Cys Ala  
 367 1925 1930 1935  
 368 Ala Ala Gly Gly Ala Gly Thr Gly Gly Ala Gly Gly Cys Thr Gly Ala  
 369 1940 1945 1950  
 370 Thr Cys Thr Cys Ala Gly Cys Ala Gly Ala Gly Cys Thr Cys Ala Ala  
 371 1955 1960 1965  
 372 Ala Cys Thr Gly Ala Cys Gly Ala Gly Gly Gly Thr Gly Ala Cys Thr  
 373 1970 1975 1980  
 374 Gly Gly Gly Gly Thr Cys Ala Gly Gly Gly Gly Thr Thr Cys Thr Gly  
 375 1985 1990 1995 2000  
 376 Gly Gly Gly Cys Gly Gly Gly Ala Thr Thr Cys Thr Gly Gly Thr  
 377 2005 2010 2015  
 378 Gly Gly Gly Cys Gly Cys Thr Ala Ala Gly Gly Thr Ala Gly Gly Ala  
 379 2020 2025 2030  
 380 Ala Ala Gly Gly Ala Gly Gly Gly Ala Gly Gly Cys Thr Gly Gly  
 381 2035 2040 2045  
 382 Gly Cys Thr Gly Thr Gly Ala Ala Gly Ala Gly Cys Cys Thr Thr Thr  
 383 2050 2055 2060  
 384 Gly Gly Gly Gly Thr Gly Ala Gly Cys Cys Thr Gly Gly Thr Gly Gly  
 385 2065 2070 2075 2080  
 386 Ala Gly Cys Cys Thr Gly Cys Gly Gly Thr Thr Thr Gly Cys Thr  
 387 2085 2090 2095  
 388 Thr Ala Thr Ala Cys Ala Ala Gly Ala Gly Cys Thr Thr Gly Gly Ala  
 389 2100 2105 2110  
 390 Thr Cys Cys Ala Thr Gly Thr Cys Gly Gly Cys Cys Thr Cys Thr Thr  
 391 2115 2120 2125  
 392 Thr Cys Ala Thr Gly Ala Gly Gly Thr Cys Ala Ala Gly Ala Gly Gly  
 393 2130 2135 2140  
 394 Cys Thr Cys Cys Ala Thr Ala Gly Ala Ala Gly Cys Thr Cys  
 395 2145 2150 2155 2160  
 396 Thr Gly Ala Gly Thr Thr Gly Cys Cys Cys Cys Ala Gly Ala Ala  
 397 2165 2170 2175  
 398 Cys Cys Ala Thr Ala Ala Cys Cys Cys Thr Thr Gly Gly Ala Gly Ala  
 399 2180 2185 2190

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

400 Thr Gly Gly Ala Gly Gly Ala Ala Gly Cys Thr Thr Gly Ala  
401 2195 2200 2205  
402 Gly Cys Cys Ala Gly Cys Cys Ala Thr Gly Gly Gly Thr Cys Gly Thr  
403 2210 2215 2220  
404 Thr Cys Cys Cys Ala Thr Thr Cys Cys Ala Cys Ala Thr Cys Cys  
405 2225 2230 2235 2240  
406 Thr Cys Thr Ala Cys Thr Cys Cys Gly Gly Cys Cys Thr Cys Thr  
407 2245 2250 2255  
408 Gly Gly Gly Thr Cys Thr Cys Cys Thr Gly Gly Ala Gly Gly Cys Ala  
409 2260 2265 2270  
410 Ala Gly Thr Ala Ala Ala Cys Ala Cys Cys Thr Ala Gly Gly Gly Cys  
411 2275 2280 2285  
412 Cys Thr Gly Gly Ala Gly Gly Cys Ala Ala Ala Ala Thr Ala  
413 2290 2295 2300  
414 Thr Cys Cys Gly Gly Cys Ala Gly Gly Thr Cys Ala Thr Gly Gly  
415 2305 2310 2315 2320  
416 Ala Gly Cys Gly Gly Ala Gly Gly Ala Gly Cys Cys Cys Gly Cys  
417 2325 2330 2335  
418 Cys Ala Gly Ala Thr Gly Cys Ala Gly Ala Gly Cys Ala Cys Ala Gly  
419 2340 2345 2350  
420 Gly Thr Cys Thr Ala Ala Ala Gly Gly Thr Gly Gly Thr Cys Cys  
421 2355 2360 2365  
422 Thr Cys Cys Thr Gly Ala Gly Gly Thr Gly Gly Cys Thr Gly Cys Ala  
423 2370 2375 2380  
424 Gly Gly Ala Gly Cys Ala Ala Cys Cys Cys Ala Gly Gly Cys Ala  
425 2385 2390 2395 2400  
426 Thr Thr Gly Gly Cys Thr Thr Gly Gly Ala Gly Cys Ala Thr Gly  
427 2405 2410 2415  
428 Cys Gly Gly Thr Gly Thr Gly Ala Cys Ala Thr Ala Gly Cys Cys  
429 2420 2425 2430  
430 Thr Thr Cys Cys Cys Thr Thr Cys Thr Thr Cys Cys Ala Gly Gly  
431 2435 2440 2445  
432 Ala Gly Gly Cys Thr Gly Ala Ala Thr Gly Gly Cys Cys Ala Cys  
433 2450 2455 2460  
434 Ala Gly Ala Ala Cys Cys Ala Cys Cys Cys Cys Cys Thr Gly Cys Cys  
435 2465 2470 2475 2480  
436 Cys Cys Ala Gly Gly Cys Thr Thr Ala Ala Gly Ala Ala Ala Thr Gly  
437 2485 2490 2495  
438 Cys Ala Thr Gly Cys Thr Ala Gly Thr Gly Cys Cys Thr Thr Cys Cys  
439 2500 2505 2510  
440 Cys Cys Ala Thr Gly Thr Cys Thr Thr Ala Thr Cys Cys Thr Ala Gly  
441 2515 2520 2525  
442 Ala Ala Thr Cys Ala Cys Ala Gly Gly Cys Thr Cys Cys Gly Gly Gly  
443 2530 2535 2540  
444 Ala Ala Ala Gly Cys Cys Ala Gly Ala Thr Gly Gly Ala Thr Gly Ala  
445 2545 2550 2555 2560  
446 Ala Cys Cys Ala Gly Gly Ala Ala Ala Gly Ala Ala Cys Gly Gly  
447 2565 2570 2575  
448 Ala Thr Thr Cys Thr Cys Ala Cys Cys Ala Thr Ala Gly Ala Thr Ala

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

449 2580 2585 2590  
450 Cys Cys Ala Thr Thr Thr Thr Gly Ala Gly Ala Thr Thr Thr Cys  
451 2595 2600 2605  
452 Ala Cys Cys Ala Thr Gly Thr Gly Cys Thr Gly Ala Gly Cys Cys Cys  
453 2610 2615 2620  
454 Thr Thr Thr Gly Cys Ala Ala Cys Ala Ala Cys Thr Cys Thr Ala Thr  
455 2625 2630 2635 2640  
456 Gly Ala Ala Thr Thr Gly Gly Cys Thr Cys Ala Thr Thr Thr Thr  
457 2645 2650 2655  
458 Gly Cys Ala Gly Ala Thr Gly Ala Gly Ala Ala Ala Gly Thr Gly  
459 2660 2665 2670  
460 Ala Cys Thr Thr Cys Thr Ala Gly Ala Gly Ala Gly Gly Thr Thr Ala  
461 2675 2680 2685  
462 Ala Gly Cys Thr Ala Cys Thr Ala Gly Cys Cys Cys Ala Ala Gly Ala  
463 2690 2695 2700  
464 Thr Cys Ala Gly Thr Ala Gly Cys Thr Ala Gly Ala Gly Gly Cys Ala  
465 2705 2710 2715 2720  
466 Ala Gly Gly Cys Ala Ala Gly Gly Ala Thr Thr Cys Ala Ala Ala Thr  
467 2725 2730 2735  
468 Cys Cys Cys Ala Gly Gly Ala Gly Thr Cys Cys Gly Gly Thr Gly Cys  
469 2740 2745 2750  
470 Thr Thr Gly Cys Ala Thr Ala Ala Ala Thr Gly Ala Ala Ala Gly Gly  
471 2755 2760 2765  
472 Ala Thr Gly Ala Ala Thr Gly Ala Ala Cys Gly Gly Ala Thr Ala Thr  
473 2770 2775 2780  
474 Thr Gly Ala Gly Thr Gly Ala Gly Thr Gly Ala Gly Thr Gly Gly Ala  
475 2785 2790 2795 2800  
476 Thr Gly Ala Ala Gly Gly Ala Ala Gly Gly Ala Gly Thr Ala Ala Ala  
477 2805 2810 2815  
478 Gly Gly Ala Gly Ala Gly Gly Cys Ala Thr Gly Ala Ala Thr Gly  
479 2820 2825 2830  
480 Ala Ala Thr Gly Ala Gly Ala Gly Gly Thr Ala Gly Ala Ala Cys  
481 2835 2840 2845  
482 Thr Cys Cys Ala Ala Gly Ala Cys Cys Cys Cys Thr Thr Ala Gly Ala  
483 2850 2855 2860  
484 Ala Cys Cys Thr Cys Gly Thr Cys Thr Gly Ala Thr Gly Thr Thr Cys  
485 2865 2870 2875 2880  
486 Cys Cys Ala Thr Thr Thr Ala Cys Ala Gly Ala Cys Ala Gly Ala  
487 2885 2890 2895  
488 Ala Ala Ala Cys Thr Gly Ala Gly Thr Cys Cys Thr Ala Gly Ala Cys  
489 2900 2905 2910  
490 Ala Gly Ala Gly Gly Cys Cys Thr Ala Gly Ala Gly Gly Ala Gly Gly  
491 2915 2920 2925  
492 Cys Cys Ala Ala Gly Ala Gly Gly Thr Gly Gly Thr Gly Gly Gly Gly  
493 2930 2935 2940  
494 Cys Cys Ala Gly Gly Thr Cys Gly Gly Gly Gly Gly Gly Cys Cys  
495 2945 2950 2955 2960  
496 Cys Thr Gly Ala Thr Gly Cys Cys Thr Gly Cys Thr Thr Cys Thr Cys  
497 2965 2970 2975

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

498 Thr Cys Gly Cys Thr Thr Gly Thr Thr Gly Cys Ala Gly Cys Cys  
499 2980 2985 2990  
500 Cys Cys Gly Ala Gly Cys Cys Ala Thr Gly Ala Thr Gly Ala Ala Gly  
501 2995 3000 3005  
502 Ala Cys Thr Thr Gly Thr Cys Cys Ala Gly Cys Gly Gly Ala  
503 3010 3015 3020  
504 Ala Cys Thr Gly Cys Ala Cys Gly Cys Thr Cys Ala Gly Thr Gly Thr  
505 3025 3030 3035 3040  
506 Gly Cys Cys Cys Gly Cys Cys Ala Ala Ala Ala Cys Thr Cys Ala  
507 3045 3050 3055  
508 Thr Ala Cys Cys Gly Cys Ala Thr Gly Gly Thr Gly Gly Thr Gly Cys  
509 3060 3065 3070  
510 Thr Gly Gly Gly Thr Gly Cys Cys Thr Cys Thr Cys Gly Gly Gly Thr  
511 3075 3080 3085  
512 Gly Gly Gly Cys Ala Ala Gly Ala Gly Cys Thr Cys Cys Ala Thr Cys  
513 3090 3095 3100  
514 Gly Thr Gly Thr Cys Thr Cys Gly Cys Thr Thr Cys Cys Thr Cys Ala  
515 3105 3110 3115 3120  
516 Ala Thr Gly Gly Cys Cys Gly Cys Thr Thr Gly Ala Gly Gly Ala  
517 3125 3130 3135  
518 Cys Cys Ala Gly Thr Ala Cys Ala Cys Cys Cys Ala Cys Cys  
519 3140 3145 3150  
520 Ala Thr Cys Gly Ala Gly Gly Ala Cys Thr Thr Cys Cys Ala Cys Cys  
521 3155 3160 3165  
522 Gly Thr Ala Ala Gly Gly Thr Ala Thr Ala Cys Ala Ala Cys Ala Thr  
523 3170 3175 3180  
524 Cys Cys Gly Cys Gly Gly Cys Gly Ala Cys Ala Thr Gly Thr Ala Cys  
525 3185 3190 3195 3200  
526 Cys Ala Gly Cys Thr Cys Gly Ala Cys Ala Thr Cys Cys Thr Gly Gly  
527 3205 3210 3215  
528 Ala Thr Ala Cys Cys Thr Cys Thr Gly Gly Cys Ala Ala Cys Cys Ala  
529 3220 3225 3230  
530 Cys Cys Cys Thr Thr Cys Cys Cys Gly Cys Cys Ala Thr Gly  
531 3235 3240 3245  
532 Cys Gly Cys Ala Gly Gly Cys Thr Gly Thr Cys Cys Ala Thr Cys Cys  
533 3250 3255 3260  
534 Thr Cys Ala Cys Ala Gly Gly Thr Gly Ala Gly Gly Cys Cys Cys Ala  
535 3265 3270 3275 3280  
536 Cys Thr Gly Gly Thr Gly Cys Cys Thr Gly Gly Gly Cys Thr Gly Gly  
537 3285 3290 3295  
538 Gly Gly Cys Gly Gly Cys Ala Gly Gly Gly Cys Cys Ala Gly Gly Gly  
539 3300 3305 3310  
540 Cys Ala Thr Gly Gly Thr Gly Cys Gly Gly Ala Gly Thr Gly Thr  
541 3315 3320 3325  
542 Gly Cys Thr Gly Gly Cys Ala Cys Thr Thr Gly Gly Cys Ala Gly  
543 3330 3335 3340  
544 Thr Thr Thr Gly Cys Ala Thr Ala Gly Ala Cys Thr Thr Gly Cys Ala  
545 3345 3350 3355 3360  
546 Thr Ala Gly Cys Cys Ala Thr Cys Gly Thr Cys Thr Gly Ala Gly Ala

## RAW SEQUENCE LISTING

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Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

547	3365	3370	3375
548	Cys Ala Gly Gly Cys Gly Thr Cys Ala Thr Cys Cys Cys Thr Gly Cys		
549	3380	3385	3390
550	Ala Cys Ala Ala Thr Gly Ala Gly Gly Cys Thr Cys Ala Gly Ala Gly		
551	3395	3400	3405
552	Ala Gly Gly Thr Thr Thr Gly Cys Cys Ala Thr Gly Thr Gly Cys		
553	3410	3415	3420
554	Thr Gly Gly Ala Ala Ala Thr Ala Gly Thr Gly Ala Thr Gly Ala Ala		
555	3425	3430	3435
556	Gly Thr Cys Gly Gly Gly Gly Cys Cys Cys Cys Gly Ala Thr Thr		
557	3445	3450	3455
558	Cys Cys Ala Thr Thr Cys Thr Gly Thr Ala Gly Ala Cys Thr Cys		
559	3460	3465	3470
560	Cys Ala Gly Ala Thr Cys Gly Ala Thr Thr Ala Cys Thr Cys Ala Thr		
561	3475	3480	3485
562	Gly Gly Cys Thr Gly Thr Cys Gly Gly Gly Cys Cys Gly Cys Cys		
563	3490	3495	3500
564	Thr Thr Cys Cys Ala Gly Ala Thr Cys Ala Gly Gly Ala Gly Cys Thr		
565	3505	3510	3515
566	Gly Ala Thr Ala Cys Cys Ala Gly Cys Ala Thr Gly Cys Cys Cys Cys		
567	3525	3530	3535
568	Ala Gly Gly Gly Ala Thr Ala Thr Thr Cys Cys Thr Thr Cys Thr		
569	3540	3545	3550
570	Ala Gly Gly Gly Ala Ala Cys Ala Gly Ala Ala Thr Gly Ala Thr Gly		
571	3555	3560	3565
572	Cys Cys Cys Thr Gly Gly Cys Thr Gly Cys Thr Gly Cys Thr Thr		
573	3570	3575	3580
574	Cys Cys Thr Thr Cys Thr Cys Gly Gly Ala Ala Gly Ala Thr Gly		
575	3585	3590	3595
576	Ala Cys Cys Cys Ala Cys Cys Ala Gly Ala Gly Cys Thr Cys Cys Ala		
577	3605	3610	3615
578	Gly Gly Gly Cys Cys Cys Ala Ala Gly Gly Thr Cys Ala Gly Thr Cys		
579	3620	3625	3630
580	Cys Ala Cys Gly Gly Gly Cys Thr Cys Ala Gly Gly Thr Cys Thr		
581	3635	3640	3645
582	Cys Cys Cys Ala Cys Cys Cys Cys Ala Gly Gly Cys Cys Cys Thr		
583	3650	3655	3660
584	Thr Thr Gly Cys Cys Ala Cys Cys Thr Cys Cys Thr Ala Gly Ala Gly		
585	3665	3670	3675
586	Ala Gly Gly Thr Ala Ala Gly Gly Cys Ala Gly Gly Ala Cys Cys		
587	3685	3690	3695
588	Cys Ala Gly Gly Cys Ala Gly Thr Gly Ala Thr Cys Ala Cys Cys Ala		
589	3700	3705	3710
590	Ala Ala Gly Gly Gly Ala Ala Gly Gly Gly Gly Cys Thr Thr Gly		
591	3715	3720	3725
592	Gly Thr Cys Ala Thr Gly Gly Thr Cys Ala Thr Ala Gly Thr Gly Ala		
593	3730	3735	3740
594	Thr Gly Gly Thr Gly Ala Thr Gly Gly Cys Ala Cys Thr Ala Gly Cys		
595	3745	3750	3755
			3760

RAW SEQUENCE LISTING  
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Input Set : A:\Seqlist.txt  
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596 Thr Gly Ala Cys Ala Cys Thr Thr Ala Thr Cys Ala Gly Ala Ala Gly  
597 3765 3770 3775  
598 Cys Thr Ala Thr Gly Gly Cys Cys Thr Gly Gly Cys Cys Cys Thr  
599 3780 3785 3790  
600 Gly Thr Thr Cys Thr Thr Ala Gly Ala Gly Cys Thr Thr Gly Gly Cys  
601 3795 3800 3805  
602 Ala Thr Gly Thr Ala Gly Thr Thr Thr Thr Thr Gly Ala  
603 3810 3815 3820  
604 Ala Ala Cys Ala Gly Ala Gly Thr Cys Thr Cys Gly Cys Thr Cys Thr  
605 3825 3830 3835 3840  
606 Gly Thr Cys Ala Cys Cys Ala Gly Gly Cys Thr Gly Gly Ala Gly  
607 3845 3850 3855  
608 Thr Gly Cys Ala Gly Thr Gly Gly Cys Gly Ala Thr Cys Thr  
609 3860 3865 3870  
610 Cys Gly Gly Cys Thr Cys Ala Cys Thr Gly Cys Ala Ala Cys Cys Thr  
611 3875 3880 3885  
612 Cys Thr Gly Cys Cys Thr Cys Cys Gly Gly Thr Thr Cys Ala  
613 3890 3895 3900  
614 Ala Gly Cys Gly Ala Thr Thr Cys Thr Cys Thr Gly Cys Cys Thr  
615 3905 3910 3915 3920  
616 Cys Ala Gly Thr Cys Cys Cys Cys Ala Ala Gly Thr Ala Gly Cys  
617 3925 3930 3935  
618 Thr Gly Gly Ala Cys Thr Ala Cys Ala Gly Gly Cys Ala Cys Gly  
619 3940 3945 3950  
620 Thr Gly Cys Cys Ala Cys Cys Ala Thr Gly Cys Cys Cys Gly Gly Cys  
621 3955 3960 3965  
622 Thr Ala Ala Thr Thr Thr Thr Gly Thr Ala Thr Thr Thr Thr  
623 3970 3975 3980  
624 Thr Ala Cys Thr Ala Gly Ala Gly Cys Gly Gly Ala Thr Thr  
625 3985 3990 3995 4000  
626 Thr Cys Ala Cys Cys Ala Thr Gly Thr Thr Ala Gly Cys Cys Ala Gly  
627 4005 4010 4015  
628 Gly Ala Thr Gly Gly Thr Cys Thr Cys Gly Ala Thr Cys Thr Cys Cys  
629 4020 4025 4030  
630 Thr Gly Ala Cys Cys Thr Cys Gly Thr Gly Ala Thr Cys Thr Gly Cys  
631 4035 4040 4045  
632 Cys Thr Ala Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Cys Ala  
633 4050 4055 4060  
634 Ala Ala Gly Thr Gly Cys Thr Gly Ala Gly Ala Thr Ala Cys Ala  
635 4065 4070 4075 4080  
636 Gly Gly Cys Gly Thr Cys Ala Gly Cys Cys Ala Cys Cys Gly Cys Gly  
637 4085 4090 4095  
638 Gly Cys Cys Ala Gly Cys Cys Ala Gly Cys Ala Thr Gly Thr Ala Gly  
639 4100 4105 4110  
640 Thr Thr Ala Thr Thr Ala Ala Cys Cys Cys Thr Cys Ala Cys Ala  
641 4115 4120 4125  
642 Gly Thr Ala Ala Ala Thr Ala Gly Thr Thr Ala Thr Thr Cys Ala Thr  
643 4130 4135 4140  
644 Thr Cys Cys Cys Thr Thr Thr Ala Cys Ala Gly Gly Thr Gly

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

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Input Set : A:\Seqlist.txt  
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645	4145	4150	4155	4160													
646	Gly	Gly	Gly	Ala	Ala	Ala	Cys	Thr	Gly	Ala	Ala	Gly	Cys	Cys	Cys	Ala	
647				4165		4170										4175	
648	Gly	Ala	Gly	Ala	Gly	Gly	Thr	Thr	Ala	Ala	Gly	Thr	Ala	Ala	Cys	Thr	
649					4180		4185									4190	
650	Cys	Ala	Cys	Thr	Cys	Cys	Ala	Gly	Thr	Gly	Gly	Thr	Ala	Gly	Cys	Ala	
651					4195		4200									4205	
652	Cys	Ala	Gly	Cys	Thr	Cys	Gly	Thr	Ala	Ala	Ala	Gly	Gly	Cys	Ala	Gly	
653					4210		4215									4220	
654	Thr	Cys	Thr	Gly	Cys	Thr	Thr	Thr	Gly	Thr	Gly	Cys	Thr	Thr	Thr		
655	4225				4230		4235									4240	
656	Cys	Ala	Gly	Ala	Cys	Ala	Ala	Ala	Gly	Cys	Cys	Ala	Thr	Ala	Cys	Cys	
657					4245		4250									4255	
658	Ala	Cys	Ala	Gly	Cys	Cys	Thr	Cys	Ala	Gly	Cys	Cys	Cys	Thr			
659					4260		4265									4270	
660	Gly	Cys	Thr	Gly	Gly	Gly	Ala	Ala	Gly	Gly	Gly	Thr	Gly	Ala	Gly	Gly	
661					4275		4280									4285	
662	Ala	Gly	Gly	Ala	Cys	Ala	Gly	Gly	Ala	Gly	Gly	Thr	Thr	Gly			
663					4290		4295									4300	
664	Gly	Gly	Gly	Gly	Ala	Ala	Gly	Ala	Ala	Gly	Gly	Gly	Gly	Thr	Gly		
665	4305				4310		4315									4320	
666	Ala	Gly	Thr	Gly	Gly	Ala	Gly	Cys	Thr	Gly	Ala	Gly	Gly	Gly	Cys		
667					4325		4330									4335	
668	Thr	Gly	Thr	Gly	Cys	Cys	Thr	Thr	Gly	Thr	Thr	Thr	Thr	Ala	Cys	Ala	
669					4340		4345									4350	
670	Cys	Thr	Gly	Cys	Ala	Thr	Thr	Ala	Gly	Cys	Ala	Thr	Gly	Thr	Ala		
671					4355		4360									4365	
672	Gly	Cys	Thr	Ala	Ala	Gly	Ala	Gly	Gly	Ala	Cys	Ala	Ala	Gly	Cys		
673					4370		4375									4380	
674	Cys	Gly	Gly	Ala	Cys	Cys	Ala	Gly	Cys	Ala	Cys	Cys	Thr	Gly			
675	4385				4390		4395									4400	
676	Gly	Gly	Thr	Gly	Thr	Gly	Ala	Gly	Cys	Cys	Thr	Gly	Gly	Thr	Thr		
677					4405		4410									4415	
678	Cys	Cys	Gly	Cys	Thr	Gly	Cys	Thr	Thr	Cys	Cys	Thr	Gly	Gly	Cys	Thr	
679					4420		4425									4430	
680	Thr	Thr	Gly	Thr	Ala	Cys	Cys	Thr	Cys	Gly	Ala	Gly	Gly	Cys	Ala	Ala	
681					4435		4440									4445	
682	Gly	Gly	Gly	Ala	Thr	Thr	Thr	Ala	Thr	Cys	Thr	Cys	Cys	'Thr	Thr		
683					4450		4455									4460	
684	Gly	Thr	Gly	Thr	Cys	Thr	Cys	Ala	Gly	Cys	Ala	Cys	Thr	Cys	Thr	Cys	
685	4465				4470		4475									4480	
686	Ala	Thr	Cys	Thr	Gly	Thr	Ala	Ala	Gly	Ala	Cys	Thr	Gly	Cys	Ala	Cys	
687					4485		4490									4495	
688	Cys	Ala	Cys	Ala	Thr	Cys	Ala	Ala	Cys	Ala	Cys	Thr	Cys	Ala	Thr	Cys	
689					4500		4505									4510	
690	Cys	Thr	Ala	Ala	Ala	Gly	Gly	Ala	Cys	Thr	Gly	Thr	Gly	Ala	Gly		
691					4515		4520									4525	
692	Ala	Cys	Thr	Thr	Ala	Ala	Ala	Thr	Gly	Ala	Ala	Thr	Gly	Ala	Ala	Thr	
693					4530		4535									4540	

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

694 Ala Thr Ala Thr Gly Thr Ala Ala Gly Gly Cys Gly Cys Thr Thr Gly  
 695 4545 4550 4555 4560  
 696 Gly Thr Gly Ala Gly Cys Ala Gly Ala Thr Ala Gly Thr Ala Ala Ala  
 697 4565 4570 4575  
 698 Thr Gly Cys Ala Cys Ala Ala Thr Ala Ala Ala Thr Cys Cys Cys Cys  
 699 4580 4585 4590  
 700 Ala Ala Gly Thr Cys Thr Thr Cys Thr Gly Thr Thr Gly Ala Gly Thr  
 701 4595 4600 4605  
 702 Cys Ala Gly Cys Ala Thr Thr Gly Cys Ala Ala Gly Thr Gly Gly  
 703 4610 4615 4620  
 704 Gly Cys Cys Thr Gly Cys Thr Ala Cys Gly Gly Thr Thr Ala Cys  
 705 4625 4630 4635 4640  
 706 Ala Cys Gly Ala Thr Cys Ala Thr Thr Thr Cys Cys Cys Ala Ala Gly  
 707 4645 4650 4655  
 708 Thr Cys Ala Cys Gly Cys Cys Cys Cys Thr Gly Ala Ala Gly Thr Thr  
 709 4660 4665 4670  
 710 Gly Cys Thr Gly Ala Gly Cys Ala Gly Gly Ala Thr Ala Ala Gly  
 711 4675 4680 4685  
 712 Gly Gly Ala Ala Gly Gly Ala Gly Thr Gly Ala Gly Cys Ala Gly Gly  
 713 4690 4695 4700  
 714 Cys Ala Ala Cys Thr Cys Thr Cys Thr Ala Gly Gly Cys Ala Thr Cys  
 715 4705 4710 4715 4720  
 716 Ala Thr Thr Cys Ala Gly Ala Thr Ala Ala Cys Cys Cys Cys Cys Cys  
 717 4725 4730 4735  
 718 Ala Ala Cys Thr Gly Ala Gly Gly Thr Ala Cys Thr Thr Cys Thr Ala  
 719 4740 4745 4750  
 720 Thr Ala Cys Ala Gly Ala Ala Ala Cys Cys Cys Ala Thr Gly  
 721 4755 4760 4765  
 722 Cys Cys Ala Cys Thr Cys Cys Cys Ala Gly Cys Cys Cys Thr Gly Cys  
 723 4770 4775 4780  
 724 Thr Gly Cys Cys Gly Cys Cys Thr Thr Gly Ala Gly Gly Cys Cys Ala  
 725 4785 4790 4795 4800  
 726 Ala Gly Ala Cys Thr Gly Ala Gly Gly Cys Thr Gly Cys Gly Gly Gly  
 727 4805 4810 4815  
 728 Gly Thr Gly Gly Cys Cys Cys Cys Cys Thr Cys Cys Thr Thr Gly Ala Gly  
 729 4820 4825 4830  
 730 Thr Gly Cys Thr Thr Cys Thr Cys Thr Thr Cys Cys Ala Gly Gly  
 731 4835 4840 4845  
 732 Cys Thr Gly Gly Cys Thr Thr Cys Cys Cys Gly Ala Gly Cys Ala  
 733 4850 4855 4860  
 734 Thr Cys Thr Gly Ala Cys Cys Cys Ala Gly Ala Cys Ala Gly Cys Ala  
 735 4865 4870 4875 4880  
 736 Gly Thr Cys Ala Ala Gly Thr Thr Cys Thr Cys Cys Gly Cys Thr Cys  
 737 4885 4890 4895  
 738 Cys Ala Cys Cys Cys Cys Gly Ala Gly Thr Thr Thr Thr Gly Gly Ala  
 739 4900 4905 4910  
 740 Gly Ala Ala Gly Gly Gly Cys Ala Thr Gly Thr Ala Gly Ala Thr  
 741 4915 4920 4925  
 742 Ala Gly Gly Ala Gly Cys Cys Cys Thr Gly Gly Thr Cys

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

743 4930 4935 4940  
 744 Gly Ala Cys Cys Thr Gly Thr Gly Thr Cys Gly Ala Ala Thr Cys  
 745 4945 4950 4955 4960  
 746 Cys Thr Thr Gly Cys Thr Gly Gly Cys Cys Thr Cys Thr Thr Gly  
 747 4965 4970 4975  
 748 Gly Cys Thr Thr Ala Ala Ala Thr Gly Thr Gly Ala Cys Cys  
 749 4980 4985 4990  
 750 Ala Gly Ala Gly Gly Cys Ala Cys Ala Thr Gly Cys Ala Thr Cys Cys  
 751 4995 5000 5005  
 752 Thr Gly Thr Cys Thr Gly Ala Gly Thr Cys Thr Cys Ala Gly Cys Cys  
 753 5010 5015 5020  
 754 Thr Cys Cys Cys Ala Gly Cys Cys Ala Cys Ala Cys Ala Gly Thr  
 755 5025 5030 5035 5040  
 756 Gly Gly Gly Cys Thr Thr Ala Ala Cys Cys Thr Cys Ala Thr Ala Cys  
 757 5045 5050 5055  
 758 Cys Cys Cys Gly Cys Ala Gly Gly Gly Ala Gly Gly Cys Thr Gly Thr  
 759 5060 5065 5070  
 760 Gly Ala Gly Gly Ala Cys Thr Gly Cys Ala Ala Gly Ala Ala Gly Gly  
 761 5075 5080 5085  
 762 Cys Thr Thr Gly Thr Gly Cys Gly Gly Gly Ala Gly Cys Thr Thr  
 763 5090 5095 5100  
 764 Cys Cys Ala Gly Cys Ala Cys Gly Thr Gly Ala Cys Gly Gly Thr  
 765 5105 5110 5115 5120  
 766 Ala Thr Thr Gly Cys Ala Thr Thr Gly Gly Thr Gly Thr Cys Ala Gly  
 767 5125 5130 5135  
 768 Cys Thr Cys Cys Cys Cys Ala Gly Cys Cys Thr Thr Gly Gly Gly  
 769 5140 5145 5150  
 770 Gly Ala Gly Gly Gly Ala Cys Thr Gly Gly Gly Thr Ala Cys Cys  
 771 5155 5160 5165  
 772 Cys Gly Cys Thr Gly Cys Ala Ala Thr Gly Ala Ala Thr Ala Ala Gly  
 773 5170 5175 5180  
 774 Gly Cys Thr Ala Ala Thr Gly Ala Cys Ala Gly Gly Gly Ala  
 775 5185 5190 5195 5200  
 776 Ala Gly Gly Ala Gly Gly Gly Gly Ala Gly Ala Thr Gly Thr  
 777 5205 5210 5215  
 778 Ala Gly Ala Gly Ala Gly Ala Ala Gly Cys Ala Cys Ala Thr Gly  
 779 5220 5225 5230  
 780 Cys Ala Thr Ala Thr Thr Cys Ala Gly Cys Ala Thr Thr Ala  
 781 5235 5240 5245  
 782 Ala Thr Thr Thr Cys Ala Gly Thr Gly Ala Cys Ala Cys Ala Ala  
 783 5250 5255 5260  
 784 Gly Thr Ala Ala Thr Ala Cys Cys Cys Ala Ala Ala Cys Ala Cys Ala  
 785 5265 5270 5275 5280  
 786 Cys Cys Cys Thr Cys Cys Thr Gly Cys Ala Ala Ala Cys Gly Cys Thr  
 787 5285 5290 5295  
 788 Ala Cys Ala Gly Ala Thr Ala Ala Ala Gly Cys Thr Ala Ala Thr Gly  
 789 5300 5305 5310  
 790 Cys Cys Cys Cys Thr Thr Cys Ala Cys Cys Cys Ala Thr Gly Thr  
 791 5315 5320 5325

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

792 Cys Cys Cys Cys Ala Ala Thr Cys Cys Cys Ala Gly Gly Cys Thr Cys  
 793 5330 5335 5340  
 794 Cys Thr Gly Cys Cys Cys Cys Thr Gly Cys Cys Cys Gly Gly Ala  
 795 5345 5350 5355 5360  
 796 Gly Gly Thr Gly Gly Cys Cys Ala Cys Cys Cys Thr Gly Gly Cys Ala  
 797 5365 5370 5375  
 798 Gly Thr Cys Thr Gly Gly Cys Ala Thr Gly Gly Ala Gly Cys Cys Thr  
 799 5380 5385 5390  
 800 Thr Cys Cys Gly Gly Cys Cys Thr Cys Cys Gly Thr Gly Ala Cys  
 801 5395 5400 5405  
 802 Thr Ala Cys Ala Cys Cys Gly Gly Cys Ala Thr Thr Cys Gly Thr Ala  
 803 5410 5415 5420  
 804 Thr Thr Thr Gly Thr Ala Thr Cys Cys Cys Ala Cys Ala Ala Thr  
 805 5425 5430 5435 5440  
 806 Gly Gly Ala Gly Ala Gly Thr Ala Thr Thr Thr Thr Gly Thr Cys  
 807 5445 5450 5455  
 808 Thr Gly Thr Cys Thr Cys Thr Thr Thr Thr Ala Thr Gly Gly  
 809 5460 5465 5470  
 810 Cys Gly Cys Ala Thr Ala Thr Cys Ala Thr Thr Cys Thr Gly Ala Gly  
 811 5475 5480 5485  
 812 Cys Ala Cys Ala Gly Cys Thr Gly Thr Cys Thr Gly Ala Thr Gly Cys  
 813 5490 5495 5500  
 814 Thr Thr Gly Thr Thr Thr Thr Thr Thr Thr Cys Ala Cys Ala  
 815 5505 5510 5515 5520  
 816 Cys Ala Cys Cys Ala Ala Cys Cys Cys Gly Thr Gly Cys Cys Thr Cys  
 817 5525 5530 5535  
 818 Ala Thr Thr Thr Cys Cys Ala Ala Cys Cys Thr Gly Gly Thr Gly  
 819 5540 5545 5550  
 820 Gly Ala Ala Cys Cys Thr Cys Ala Thr Thr Thr Thr Thr Cys Ala  
 821 5555 5560 5565  
 822 Ala Cys Cys Thr Cys Ala Thr Thr Thr Cys Cys Thr Gly Cys Thr  
 823 5570 5575 5580  
 824 Gly Cys Thr Cys Ala Gly Gly Ala Ala Ala Thr Thr Cys Thr Gly Ala  
 825 5585 5590 5595 5600  
 826 Ala Ala Gly Cys Cys Ala Thr Thr Ala Ala Thr Thr Cys Cys Ala Cys  
 827 5605 5610 5615  
 828 Thr Gly Cys Cys Ala Gly Cys Thr Cys Thr Thr Cys Thr Cys Cys  
 829 5620 5625 5630  
 830 Ala Gly Cys Thr Gly Cys Cys Ala Gly Ala Cys Gly Gly Cys Cys  
 831 5635 5640 5645  
 832 Gly Ala Thr Cys Thr Cys Thr Gly Ala Thr Gly Cys Thr Thr Gly Gly  
 833 5650 5655 5660  
 834 Cys Ala Thr Cys Gly Cys Ala Gly Thr Cys Thr Cys Gly Cys Ala Thr  
 835 5665 5670 5675 5680  
 836 Thr Thr Gly Ala Ala Thr Ala Thr Gly Thr Cys Ala Ala Gly Gly Cys  
 837 5685 5690 5695  
 838 Cys Ala Cys Gly Ala Gly Thr Cys Cys Thr Cys Ala Gly Gly Gly Gly  
 839 5700 5705 5710  
 840 Cys Cys Cys Cys Gly Gly Ala Thr Thr Ala Gly Cys Cys Thr Ala Ala

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

841 5715 5720 5725  
 842 Cys Gly Gly Gly Ala Thr Gly Gly Gly Thr Thr Gly Gly Cys  
 843 5730 5735 5740  
 844 Ala Gly Cys Cys Cys Ala Ala Gly Cys Ala Gly Gly Ala Ala  
 845 5745 5750 5755 5760  
 846 Gly Thr Thr Gly Cys Cys Ala Ala Gly Cys Thr Gly Ala Cys Gly Cys  
 847 5765 5770 5775  
 848 Thr Gly Cys Cys Thr Cys Gly Cys Ala Ala Gly Thr Gly Cys Cys Thr  
 849 5780 5785 5790  
 850 Thr Thr Cys Ala Gly Ala Ala Gly Cys Cys Cys Ala Cys Ala  
 851 5795 5800 5805  
 852 Cys Thr Gly Cys Ala Gly Thr Thr Cys Cys Cys Thr Cys Cys Ala Thr  
 853 5810 5815 5820  
 854 Cys Ala Cys Cys Thr Cys Cys Ala Thr Cys Cys Ala Thr Thr Cys  
 855 5825 5830 5835 5840  
 856 Ala Gly Gly Cys Thr Cys Cys Thr Thr Gly Gly Thr Thr Ala Ala  
 857 5845 5850 5855  
 858 Cys Ala Cys Thr Gly Ala Cys Thr Gly Thr Gly Thr Gly Cys Cys Ala  
 859 5860 5865 5870  
 860 Gly Gly Cys Cys Cys Thr Gly Gly Gly Ala Gly Ala Cys Cys Ala  
 861 5875 5880 5885  
 862 Gly Gly Ala Cys Gly Ala Gly Thr Gly Gly Thr Gly Ala Thr Gly  
 863 5890 5895 5900  
 864 Gly Ala Ala Cys Cys Cys Thr Thr Cys Thr Cys Thr Gly Thr Gly Cys  
 865 5905 5910 5915 5920  
 866 Cys Cys Gly Ala Gly Cys Thr Gly Thr Thr Gly Gly Ala Gly Cys  
 867 5925 5930 5935  
 868 Ala Cys Ala Cys Cys Thr Thr Gly Ala Thr Cys Thr Gly Gly Ala  
 869 5940 5945 5950  
 870 Cys Ala Cys Cys Ala Thr Thr Cys Thr Gly Ala Ala Thr Gly Thr Gly  
 871 5955 5960 5965  
 872 Cys Cys Ala Thr Gly Thr Gly Cys Cys Ala Thr Thr Ala Ala Ala Thr  
 873 5970 5975 5980  
 874 Gly Gly Gly Gly Thr Ala Ala Ala Thr Gly Ala Thr Gly Thr Gly  
 875 5985 5990 5995 6000  
 876 Cys Thr Cys Thr Gly Gly Gly Gly Thr Gly Cys Ala Gly Ala Gly  
 877 6005 6010 6015  
 878 Gly Ala Ala Gly Gly Thr Gly Gly Cys Ala Gly Cys Cys Ala Thr Thr  
 879 6020 6025 6030  
 880 Cys Thr Gly Cys Cys Ala Gly Ala Ala Gly Cys Thr Gly Gly Ala Ala  
 881 6035 6040 6045  
 882 Cys Thr Gly Gly Thr Thr Gly Cys Thr Thr Cys Thr Cys Thr Thr Cys  
 883 6050 6055 6060  
 884 Thr Cys Ala Ala Gly Ala Ala Thr Thr Gly Gly Gly Cys Cys Ala  
 885 6065 6070 6075 6080  
 886 Ala Thr Thr Gly Cys Thr Gly Ala Thr Thr Cys Cys Thr Cys Thr Gly  
 887 6085 6090 6095  
 888 Gly Gly Cys Cys Thr Cys Ala Gly Thr Thr Cys Cys Thr Cys Ala  
 889 6100 6105 6110

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

890 Thr Cys Thr Gly Thr Gly Ala Gly Ala Cys Ala Gly Gly Gly Ala Thr,  
891 6115 6120 6125  
892 Cys Thr Thr Gly Thr Cys Ala Cys Ala Cys Cys Ala Cys Ala Ala Gly  
893 6130 6135 6140  
894 Gly Cys Thr Ala Thr Cys Ala Ala Gly Ala Gly Thr Thr Thr Gly Ala  
895 6145 6150 6155 6160  
896 Gly Cys Ala Ala Ala Gly Thr Gly Gly Thr Thr Gly Gly Ala Cys  
897 6165 6170 6175  
898 Gly Cys Ala Gly Thr Gly Gly Cys Thr Cys Ala Thr Gly Cys Cys Thr  
899 6180 6185 6190  
900 Gly Thr Ala Ala Thr Cys Cys Ala Gly Cys Thr Cys Thr Thr Thr  
901 6195 6200 6205  
902 Gly Gly Gly Ala Gly Gly Cys Cys Gly Ala Gly Gly Thr Gly Gly Gly  
903 6210 6215 6220  
904 Cys Ala Gly Ala Thr Cys Thr Cys Thr Gly Ala Gly Gly Thr Cys  
905 6225 6230 6235 6240  
906 Ala Gly Gly Ala Gly Thr Thr Cys Ala Ala Gly Ala Cys Cys Ala Gly  
907 6245 6250 6255  
908 Cys Cys Thr Gly Gly Cys Thr Ala Ala Cys Ala Cys Ala Gly Thr Gly  
909 6260 6265 6270  
910 Ala Ala Ala Cys Ala Cys Cys Gly Thr Cys Thr Cys Thr Ala Cys Thr  
911 6275 6280 6285  
912 Ala Ala Ala Ala Ala Thr Ala Cys Ala Ala Ala Ala Ala Ala Thr  
913 6290 6295 6300  
914 Thr Ala Gly Cys Cys Ala Gly Gly Thr Gly Thr Gly Gly Thr Gly Ala  
915 6305 6310 6315 6320  
916 Thr Gly Gly Gly Cys Ala Cys Cys Thr Gly Thr Ala Ala Thr Cys Cys  
917 6325 6330 6335  
918 Cys Ala Gly Thr Thr Ala Cys Thr Cys Gly Gly Gly Ala Gly Gly Cys  
919 6340 6345 6350  
920 Thr Gly Ala Gly Gly Cys Ala Gly Gly Ala Gly Ala Ala Thr Cys Thr  
921 6355 6360 6365  
922 Cys Thr Thr Gly Ala Ala Cys Cys Ala Gly Gly Ala Gly Gly Thr  
923 6370 6375 6380  
924 Gly Gly Ala Gly Gly Thr Thr Gly Cys Ala Gly Thr Gly Ala Gly Cys  
925 6385 6390 6395 6400  
926 Thr Gly Ala Gly Ala Thr Cys Thr Thr Gly Cys Cys Ala Thr Thr Gly  
927 6405 6410 6415  
928 Cys Ala Thr Thr Cys Cys Ala Gly Gly Cys Thr Gly Gly Gly Cys Ala  
929 6420 6425 6430  
930 Ala Cys Ala Ala Gly Ala Gly Thr Gly Ala Ala Ala Cys Thr Cys Thr  
931 6435 6440 6445  
932 Gly Thr Cys Thr Cys Ala Gly Ala Ala Ala Ala Thr Ala Ala Ala Thr  
933 6450 6455 6460  
934 Ala Ala Ala Thr Ala Ala Ala Thr Ala Ala Ala Thr Ala Ala Ala Ala  
935 6465 6470 6475 6480  
936 Ala Ala Thr Ala Gly Cys Thr Ala Gly Gly Cys Ala Thr Gly Gly Thr  
937 6485 6490 6495  
938 Gly Ala Cys Ala Gly Gly Cys Cys Cys Thr Gly Thr Ala Ala Thr

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

939	6500	6505	6510
940	Cys Cys Cys Ala Gly Cys Thr Gly Cys Thr Cys Cys Ala Gly Ala Gly		
941	6515	6520	6525
942	Gly Cys Thr Gly Ala Gly Gly Cys Ala Gly Gly Ala Gly Ala Ala Thr		
943	6530	6535	6540
944	Cys Gly Cys Thr Thr Ala Ala Ala Cys Cys Cys Ala Gly Gly Ala Gly		
945	6545	6550	6555
946	Gly Thr Gly Gly Ala Ala Gly Thr Thr Gly Cys Ala Gly Thr Gly Ala		
947	6565	6570	6575
948	Gly Cys Cys Ala Ala Gly Ala Thr Cys Ala Cys Ala Cys Ala Cys		
949	6580	6585	6590
950	Thr Gly Cys Ala Cys Thr Cys Cys Ala Gly Cys Cys Thr Gly Gly Gly		
951	6595	6600	6605
952	Cys Cys Ala Cys Ala Gly Ala Gly Ala Ala Ala Gly Ala Cys Thr Cys		
953	6610	6615	6620
954	Cys Ala Thr Cys Thr Cys Ala		
955	6625	6630	6635
956	Ala Gly		
957	6645	6650	6655
958	Thr Thr Thr Ala Ala Gly Cys Ala Ala Ala Ala Gly Thr Gly Ala Gly		
959	6660	6665	6670
960	Gly Ala Ala Gly Gly Thr Gly Cys Thr Thr Ala Thr Thr Ala Ala Ala		
961	6675	6680	6685
962	Ala Gly Cys Thr Gly Gly Ala Ala Ala Ala Thr Cys Ala Gly Gly Ala Thr		
963	6690	6695	6700
964	Gly Gly Ala Gly Gly Thr Ala Cys Cys Ala Gly Thr Cys Cys Ala Gly		
965	6705	6710	6715
966	Ala Cys Ala Gly Cys Cys Thr Cys Cys Cys Cys Ala Cys Cys Ala Cys		
967	6725	6730	6735
968	Cys Cys Cys Ala Cys Cys Gly Thr Cys Thr Cys Cys Ala Cys Ala Gly		
969	6740	6745	6750
970	Cys Ala Gly Cys Cys Cys Cys Thr Gly Thr Thr Thr Cys Ala Gly Ala		
971	6755	6760	6765
972	Thr Thr Cys Ala Cys Ala Ala Gly Cys Cys Thr Gly Cys Cys Thr Thr		
973	6770	6775	6780
974	Gly Ala Gly Thr Gly Ala Thr Gly Cys Ala Gly Thr Gly Ala Gly Thr		
975	6785	6790	6795
976	Thr Ala Thr Cys Cys Thr Gly Gly Ala Gly Gly Cys Ala Gly Thr Gly		
977	6805	6810	6815
978	Thr Gly Gly Cys Cys Thr Thr Gly Gly Ala Gly Gly Cys Cys Ala		
979	6820	6825	6830
980	Gly Cys Ala Cys Thr Cys Ala Cys Thr Thr Thr Thr Cys Ala Thr		
981	6835	6840	6845
982	Cys Cys Thr Ala Thr Gly Ala Gly Ala Thr Thr Ala Thr Thr Gly Ala		
983	6850	6855	6860
984	Gly Ala Ala Gly Cys Ala Gly Ala Gly Cys Ala Cys Cys Cys Thr		
985	6865	6870	6875
986	Ala Cys Cys Gly Gly Thr Gly Cys Cys Ala Gly Gly Ala Ala Cys		
987	6885	6890	6895

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

988 Gly Ala Gly Cys Thr Ala Gly Gly Thr Gly Ala Gly Ala Ala Cys Ala  
 989 6900 6905 6910  
 990 Gly Ala Ala Thr Cys Ala Gly Gly Thr Ala Gly Ala Ala Ala Thr Cys  
 991 6915 6920 6925  
 992 Thr Cys Ala Gly Cys Cys Thr Ala Gly Cys Cys Ala Cys Ala Cys Gly  
 993 6930 6935 6940  
 994 Gly Ala Ala Gly Cys Thr Gly Thr Gly Thr Gly Ala Thr Cys Thr Thr  
 995 6945 6950 6955 6960  
 996 Gly Gly Gly Cys Ala Gly Gly Cys Thr Gly Cys Ala Thr Ala Cys Cys  
 997 6965 6970 6975  
 998 Cys Thr Thr Cys Thr Gly Ala Gly Cys Cys Thr Cys Ala Gly Thr  
 999 6980 6985 6990  
 1000 Thr Thr Gly Cys Thr Cys Ala Cys Cys Thr Gly Thr Ala Ala Thr Gly  
 1001 6995 7000 7005  
 1002 Cys Ala Ala Ala Gly Gly Thr Ala Ala Cys Ala Ala Ala Ala Thr Cys  
 1003 7010 7015 7020  
 1004 Thr Thr Gly Ala Cys Ala Gly Ala Gly Gly Cys Ala Thr Ala Gly Thr  
 1005 7025 7030 7035 7040  
 1006 Gly Ala Gly Gly Ala Ala Thr Cys Ala Ala Gly Ala Gly Ala Ala Cys  
 1007 7045 7050 7055  
 1008 Ala Ala Cys Gly Gly Gly Cys Cys Thr Gly Gly Ala Gly Cys Ala Thr  
 1009 7060 7065 7070  
 1010 Ala Cys Ala Cys Cys Cys Ala Gly Thr Gly Cys Thr Thr Ala Gly Cys  
 1011 7075 7080 7085  
 1012 Cys Cys Cys Cys Ala Gly Thr Ala Gly Gly Cys Cys Cys Thr Cys Ala  
 1013 7090 7095 7100  
 1014 Cys Thr Cys Thr Cys Ala Thr Cys Ala Thr Thr Ala Cys Thr Gly Ala  
 1015 7105 7110 7115 7120  
 1016 Cys Ala Cys Cys Thr Gly Ala Gly Gly Thr Cys Ala Cys Thr Gly Ala  
 1017 7125 7130 7135  
 1018 Gly Cys Ala Thr Gly Thr Gly Cys Cys Ala Cys Thr Gly Thr Cys Cys  
 1019 7140 7145 7150  
 1020 Ala Thr Thr Cys Ala Thr Thr Ala Thr Cys Thr Thr Gly Cys Ala Thr  
 1021 7155 7160 7165  
 1022 Ala Ala Cys Thr Cys Cys Cys Ala Ala Ala Ala Thr Cys Ala Thr Cys  
 1023 7170 7175 7180  
 1024 Cys Thr Gly Cys Ala Ala Gly Gly Thr Ala Ala Thr Ala Thr Thr Thr  
 1025 7185 7190 7195 7200  
 1026 Cys Ala Thr Cys Thr Thr Cys Ala Thr Gly Ala Ala Ala Cys Ala Gly  
 1027 7205 7210 7215  
 1028 Ala Cys Ala Gly Ala Gly Ala Ala Ala Cys Thr Gly Ala Gly Gly Thr  
 1029 7220 7225 7230  
 1030 Thr Ala Cys Ala Gly Ala Gly Gly Thr Thr Thr Cys Gly Thr Gly Ala  
 1031 7235 7240 7245  
 1032 Thr Cys Thr Gly Cys Cys Cys Ala Ala Gly Thr Cys Thr Gly Cys Thr  
 1033 7250 7255 7260  
 1034 Gly Gly Cys Ala Gly Cys Thr Ala Ala Gly Cys Gly Gly Ala Thr Gly  
 1035 7265 7270 7275 7280  
 1036 Ala Gly Gly Cys Cys Ala Gly Ala Thr Gly Cys Ala Ala Ala Cys Thr

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\\Seqlist.txt  
Output Set: N:\\CRF3\\05172001\\I778963.raw

1037	7285	7290	7295
1038	Ala Gly Gly Cys Ala Thr Thr Gly Ala Gly Cys Ala Ala Gly Ala Cys		
1039	7300	7305	7310
1040	Ala Gly Gly Cys Ala Gly Gly Ala Cys Cys Cys Cys Thr Gly Cys Thr		
1041	7315	7320	7325
1042	Cys Thr Cys Ala Thr Ala Gly Ala Ala Ala Thr Gly Ala Thr Thr Thr		
1043	7330	7335	7340
1044	Thr Thr Ala Thr Thr Ala Thr Cys Thr Gly Ala Ala Cys		
1045	7345	7350	7355
1046	Ala Cys Ala Gly Thr Cys Cys Ala Cys Ala Ala Gly Thr Gly		
1047	7365	7370	7375
1048	Ala Cys Cys Thr Ala Cys Cys Cys Thr Cys Thr Cys Ala Gly		
1049	7380	7385	7390
1050	Cys Cys Cys Thr Gly Cys Ala Ala Ala Gly Ala Ala Ala Thr Gly Thr		
1051	7395	7400	7405
1052	Gly Ala Ala Gly Thr Gly Ala Gly Thr Thr Ala Ala Cys Thr Gly Thr		
1053	7410	7415	7420
1054	Ala Thr Thr Thr Gly Ala Ala Cys Cys Ala Ala Gly Thr Gly Gly Thr		
1055	7425	7430	7435
1056	Cys Cys Ala Cys Gly Thr Gly Thr Thr Ala Gly Cys Thr Ala Thr Gly		
1057	7445	7450	7455
1058	Cys Gly Ala Cys Thr Gly Thr Gly Ala Ala Cys Ala Gly Gly Gly		
1059	7460	7465	7470
1060	Cys Thr Thr Cys Ala Ala Cys Cys Cys Cys Cys Thr Cys Ala Gly Cys		
1061	7475	7480	7485
1062	Cys Thr Cys Ala Gly Thr Thr Cys Cys Thr Gly Thr Cys Cys Thr		
1063	7490	7495	7500
1064	Gly Gly Ala Ala Ala Ala Thr Ala Ala Thr Cys Gly Cys Ala Gly Gly		
1065	7505	7510	7515
1066	Gly Ala Gly Ala Ala Thr Ala Ala Thr Cys Gly Cys Ala Gly Cys Thr		
1067	7525	7530	7535
1068	Ala Cys Cys Cys Cys Gly Ala Ala Gly Ala Gly Thr Cys Gly Cys Thr		
1069	7540	7545	7550
1070	Gly Thr Gly Thr Ala Gly Gly Thr Thr Ala Ala Ala Gly Cys Ala Gly		
1071	7555	7560	7565
1072	Thr Thr Ala Thr Gly Cys Cys Gly Cys Ala Thr Ala Ala Cys Thr Gly		
1073	7570	7575	7580
1074	Cys Thr Thr Cys Ala Gly Gly Cys Ala Cys Cys Thr Gly Thr Gly		
1075	7585	7590	7595
1076	Ala Cys Thr Cys Cys Ala Gly Cys Thr Cys Thr Ala Gly Gly		
1077	7605	7610	7615
1078	Gly Cys Thr Gly Ala Thr Gly Thr Thr Cys Thr Gly Thr Gly Gly Cys		
1079	7620	7625	7630
1080	Cys Ala Gly Ala Gly Gly Ala Gly Gly Cys Ala Gly Gly Gly Gly		
1081	7635	7640	7645
1082	Thr Thr Gly Cys Ala Gly Cys Thr Gly Gly Cys Cys Gly Gly Thr Gly		
1083	7650	7655	7660
1084	Ala Ala Cys Thr Cys Ala Cys Thr Ala Cys Cys Thr Gly Gly Gly Cys		
1085	7665	7670	7675
			7680

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

1086 Thr Cys Thr Cys Thr Cys Cys Thr Gly Cys Ala Gly Gly Gly  
 1087 7685 7690 7695  
 1088 Ala Thr Gly Thr Cys Thr Cys Ala Thr Cys Cys Thr Gly Gly Thr  
 1089 7700 7705 7710  
 1090 Gly Thr Thr Cys Ala Gly Cys Cys Thr Gly Gly Ala Thr Ala Ala Cys  
 1091 7715 7720 7725  
 1092 Cys Gly Gly Gly Ala Gly Thr Cys Cys Thr Thr Cys Gly Ala Thr Gly  
 1093 7730 7735 7740  
 1094 Ala Gly Gly Thr Cys Ala Ala Gly Cys Gly Cys Cys Thr Thr Cys Ala  
 1095 7745 7750 7755 7760  
 1096 Gly Ala Ala Gly Cys Ala Gly Ala Thr Cys Cys Thr Gly Gly Ala Gly  
 1097 7765 7770 7775  
 1098 Gly Thr Cys Ala Ala Gly Thr Cys Cys Thr Gly Cys Cys Thr Gly Ala  
 1099 7780 7785 7790  
 1100 Ala Gly Ala Ala Cys Ala Ala Gly Ala Cys Cys Ala Ala Gly Gly Ala  
 1101 7795 7800 7805  
 1102 Gly Gly Cys Gly Gly Cys Gly Ala Gly Cys Thr Gly Cys Cys Cys Cys  
 1103 7810 7815 7820  
 1104 Ala Thr Gly Gly Thr Cys Ala Thr Cys Thr Gly Thr Gly Gly Cys Ala  
 1105 7825 7830 7835 7840  
 1106 Ala Cys Ala Ala Gly Ala Ala Cys Gly Ala Cys Cys Ala Cys Gly Gly  
 1107 7845 7850 7855  
 1108 Cys Gly Ala Gly Cys Thr Gly Thr Gly Cys Cys Gly Cys Cys Ala Gly  
 1109 7860 7865 7870  
 1110 Gly Thr Gly Cys Cys Ala Cys Cys Ala Cys Cys Gly Ala Gly Gly  
 1111 7875 7880 7885  
 1112 Cys Cys Gly Ala Gly Cys Thr Gly Cys Thr Gly Gly Thr Gly Thr Cys  
 1113 7890 7895 7900  
 1114 Gly Gly Gly Cys Gly Ala Cys Gly Ala Ala Cys Thr Gly Cys  
 1115 7905 7910 7915 7920  
 1116 Gly Cys Cys Thr Ala Cys Thr Thr Cys Gly Ala Gly Gly Thr Gly Thr  
 1117 7925 7930 7935  
 1118 Cys Gly Gly Cys Cys Ala Ala Gly Ala Ala Ala Cys Ala Cys  
 1119 7940 7945 7950  
 1120 Cys Ala Ala Cys Gly Thr Gly Gly Ala Cys Gly Ala Gly Ala Thr Gly  
 1121 7955 7960 7965  
 1122 Thr Thr Cys Thr Ala Cys Gly Thr Gly Cys Thr Cys Thr Thr Cys Ala  
 1123 7970 7975 7980  
 1124 Gly Cys Ala Thr Gly Gly Cys Cys Ala Ala Gly Cys Thr Gly Cys Cys  
 1125 7985 7990 7995 8000  
 1126 Ala Cys Ala Cys Gly Ala Gly Ala Thr Gly Ala Gly Cys Cys Cys  
 1127 8005 8010 8015  
 1128 Gly Cys Cys Cys Thr Gly Cys Ala Thr Cys Gly Cys Ala Ala Gly Ala  
 1129 8020 8025 8030  
 1130 Thr Cys Thr Cys Cys Gly Thr Gly Cys Ala Gly Thr Ala Cys Gly Gly  
 1131 8035 8040 8045  
 1132 Thr Gly Ala Cys Gly Cys Cys Thr Thr Cys Cys Ala Cys Cys Cys Cys  
 1133 8050 8055 8060  
 1134 Ala Gly Gly Cys Cys Cys Thr Thr Cys Thr Gly Cys Ala Thr Gly Cys

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

1135	8065	8070	8075	8080
1136	Gly Cys Cys Gly Cys Gly Thr Cys Ala Ala Gly Gly Ala Gly Ala Thr			
1137	8085	8090	8095	
1138	Gly Gly Ala Cys Gly Cys Cys Thr Ala Thr Gly Gly Cys Ala Thr Gly			
1139	8100	8105	8110	
1140	Gly Thr Cys Thr Cys Gly Cys Cys Thr Thr Cys Gly Cys Cys Cys			
1141	8115	8120	8125	
1142	Gly Cys Cys Gly Cys Cys Cys Ala Gly Cys Gly Thr Cys Ala Ala			
1143	8130	8135	8140	
1144	Cys Ala Gly Thr Gly Ala Cys Cys Thr Cys Ala Ala Gly Thr Ala Cys			
1145	8145	8150	8155	8160
1146	Ala Thr Cys Ala Ala Gly Gly Cys Cys Ala Ala Gly Gly Thr Cys Cys			
1147	8165	8170	8175	
1148	Thr Thr Cys Gly Gly Ala Ala Gly Gly Cys Cys Ala Gly Gly Cys			
1149	8180	8185	8190	
1150	Cys Cys Gly Thr Gly Ala Gly Ala Gly Gly Ala Cys Ala Ala Gly			
1151	8195	8200	8205	
1152	Thr Gly Cys Ala Cys Cys Ala Thr Cys Cys Ala Gly Thr Gly Ala Gly			
1153	8210	8215	8220	
1154	Cys Gly Ala Gly Gly Ala Thr Gly Cys Thr Gly Gly Gly Cys			
1155	8225	8230	8235	8240
1156	Gly Gly Gly Cys Thr Thr Gly Gly Cys Cys Ala Gly Thr Gly Cys			
1157	8245	8250	8255	
1158	Cys Thr Thr Cys Ala Gly Gly Ala Gly Gly Thr Gly Gly Cys Cys			
1159	8260	8265	8270	
1160	Cys Cys Ala Gly Ala Thr Gly Cys Cys Cys Ala Cys Thr Gly Thr Gly			
1161	8275	8280	8285	
1162	Cys Gly Cys Ala Thr Cys Thr Cys Cys Cys Ala Cys Cys Gly Ala			
1163	8290	8295	8300	
1164	Gly Gly Cys Cys Cys Gly Cys Ala Gly Cys Ala Gly Thr Cys			
1165	8305	8310	8315	8320
1166	Thr Thr Gly Thr Thr Cys Ala Cys Ala Gly Ala Cys Cys Thr Thr Ala			
1167	8325	8330	8335	
1168	Gly Gly Cys Ala Cys Cys Ala Gly Ala Cys Thr Gly Gly Ala Gly Gly			
1169	8340	8345	8350	
1170	Cys Cys Cys Cys Gly Gly Cys Gly Cys Thr Gly Gly Cys Cys			
1171	8355	8360	8365	
1172	Thr Cys Cys Gly Cys Ala Cys Ala Thr Thr Cys Gly Thr Cys Thr Gly			
1173	8370	8375	8380	
1174	Cys Cys Thr Thr Cys Thr Cys Ala Cys Ala Gly Cys Thr Thr Thr Cys			
1175	8385	8390	8395	8400
1176	Cys Thr Gly Ala Gly Thr Cys Cys Gly Cys Thr Thr Gly Thr Cys Cys			
1177	8405	8410	8415	
1178	Ala Cys Ala Gly Cys Thr Cys Cys Thr Thr Gly Gly Thr Gly Gly Thr			
1179	8420	8425	8430	
1180	Thr Thr Cys Ala Thr Cys Thr Cys Cys Thr Cys Thr Gly Thr Gly Gly			
1181	8435	8440	8445	
1182	Gly Ala Gly Gly Ala Cys Ala Cys Ala Thr Cys Thr Cys Thr Gly Cys			
1183	8450	8455	8460	

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

1184 Ala Gly Cys Cys Thr Cys Ala Ala Gly Ala Gly Thr Thr Ala Gly Gly  
 1185 8465 8470 8475 8480  
 1186 Cys Ala Gly Ala Gly Ala Cys Thr Cys Ala Ala Gly Thr Thr Ala Cys  
 1187 8485 8490 8495  
 1188 Ala Cys Cys Thr Thr Cys Cys Thr Cys Thr Cys Cys Thr Gly Gly Gly  
 1189 8500 8505 8510  
 1190 Gly Thr Thr Gly Gly Ala Ala Ala Ala Thr Gly Thr Thr Gly  
 1191 8515 8520 8525  
 1192 Ala Thr Gly Cys Cys Ala Gly Ala Gly Gly Gly Thr Gly Ala Gly  
 1193 8530 8535 8540  
 1194 Gly Ala Thr Thr Gly Cys Thr Gly Cys Gly Thr Cys Ala Thr Ala Thr  
 1195 8545 8550 8555 8560  
 1196 Gly Gly Ala Gly Cys Cys Thr Cys Cys Thr Gly Gly Gly Ala Cys Ala  
 1197 8565 8570 8575  
 1198 Ala Gly Cys Cys Thr Cys Ala Gly Gly Ala Thr Gly Ala Ala Ala  
 1199 8580 8585 8590  
 1200 Gly Gly Ala Cys Ala Cys Ala Gly Ala Ala Gly Gly Cys Cys Ala Gly  
 1201 8595 8600 8605  
 1202 Ala Thr Gly Ala Gly Ala Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr  
 1203 8610 8615 8620  
 1204 Cys Thr Cys Thr Cys Cys Thr Gly Gly Cys Ala Thr Ala Ala Cys Ala  
 1205 8625 8630 8635 8640  
 1206 Cys Cys Cys Ala Gly Cys Thr Thr Gly Gly Thr Thr Thr Gly Gly Gly  
 1207 8645 8650 8655  
 1208 Thr Gly Gly Cys Ala Gly Cys Thr Gly Gly Gly Ala Gly Ala Ala Cys  
 1209 8660 8665 8670  
 1210 Thr Thr Cys Thr Cys Thr Cys Cys Ala Gly Cys Cys Cys Thr Gly  
 1211 8675 8680 8685  
 1212 Cys Ala Ala Cys Thr Cys Thr Ala Cys Gly Cys Thr Cys Thr Gly  
 1213 8690 8695 8700  
 1214 Gly Thr Thr Cys Ala Gly Cys Thr Gly Cys Cys Thr Cys Thr Gly Cys  
 1215 8705 8710 8715 8720  
 1216 Ala Cys Cys Cys Cys Cys Thr Cys Cys Cys Ala Cys Cys Cys Cys Cys  
 1217 8725 8730 8735  
 1218 Ala Gly Cys Ala Cys Ala Cys Ala Cys Ala Cys Ala Ala Gly Thr Thr  
 1219 8740 8745 8750  
 1220 Gly Gly Cys Cys Cys Cys Cys Ala Gly Cys Thr Gly Cys Gly Cys Cys  
 1221 8755 8760 8765  
 1222 Thr Gly Ala Cys Ala Thr Thr Gly Ala Gly Cys Cys Ala Gly Thr Gly  
 1223 8770 8775 8780  
 1224 Gly Ala Cys Thr Cys Thr Gly Thr Gly Thr Cys Thr Gly Ala Ala Gly  
 1225 8785 8790 8795 8800  
 1226 Gly Gly Gly Cys Gly Thr Gly Gly Cys Cys Ala Cys Ala Cys Cys  
 1227 8805 8810 8815  
 1228 Thr Cys Cys Thr Ala Gly Ala Cys Cys Ala Cys Gly Cys Cys Cys Ala  
 1229 8820 8825 8830  
 1230 Cys Cys Ala Cys Thr Thr Ala Gly Ala Cys Cys Ala Cys Gly Cys Cys  
 1231 8835 8840 8845  
 1232 Cys Ala Cys Cys Thr Cys Cys Thr Gly Ala Cys Cys Gly Cys Gly Thr

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

1233	8850	8855	8860
1234	Thr Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Thr Cys		
1235	8865	8870	8875
1236	Cys Thr Ala Gly Gly Thr Cys Cys Cys Thr Cys Cys Gly Cys Cys		8880
1237	8885	8890	8895
1238	Gly Ala Cys Ala Gly Thr Thr Gly Thr Gly Cys Thr Thr Gly Thr		
1239	8900	8905	8910
1240	Thr Gly Thr Gly Gly Thr Thr Gly Cys Ala Gly Cys Thr Gly Thr Thr		
1241	8915	8920	8925
1242	Thr Thr Cys Gly Thr Gly Thr Cys Ala Thr Gly Thr Ala Thr Ala Gly		
1243	8930	8935	8940
1244	Thr Ala Gly Thr Ala Gly Ala Ala Thr Gly Gly Ala Ala Ala Thr		
1245	8945	8950	8955
1246	Cys Ala Thr Thr Gly Thr Ala Cys Thr Gly Thr Ala Ala Ala Gly		8960
1247	8965	8970	8975
1248	Cys Cys Thr Ala Gly Thr Gly Ala Cys Thr Cys Cys Cys Thr Cys Cys		
1249	8980	8985	8990
1250	Thr Thr Gly Gly Cys Cys Ala Gly Gly Cys Cys Cys Thr Cys Ala Cys		
1251	8995	9000	9005
1252	Cys Cys Ala Gly Thr Thr Cys Ala Gly Ala Thr Cys Cys Ala Cys Gly		
1253	9010	9015	9020
1254	Gly Cys Cys Thr Cys Cys Ala Cys Cys Cys Gly Gly Gly Ala Cys Gly		
1255	9025	9030	9035
1256	Cys Cys Thr Thr Cys Cys Thr Cys Cys Thr Cys Thr Gly Cys Thr Cys		
1257	9045	9050	9055
1258	Cys Cys Ala Ala Ala Cys Ala Gly Gly Thr Thr Thr Cys Cys Gly		
1259	9060	9065	9070
1260	Thr Gly Gly Cys Cys Thr Gly Thr Thr Gly Cys Ala Gly Cys Thr		
1261	9075	9080	9085
1262	Ala Gly Ala Cys Ala Thr Thr Gly Ala Cys Cys Thr Cys Cys Gly Cys		
1263	9090	9095	9100
1264	Cys Ala Thr Thr Gly Ala Gly Cys Thr Cys Cys Ala Cys Gly Gly Thr		
1265	9105	9110	9115
1266	Thr Thr Ala Cys Ala Gly Ala Cys Ala Ala Thr Thr Gly Cys Ala Cys		
1267	9125	9130	9135
1268	Ala Ala Gly Cys Gly Thr Gly Gly Gly Thr Gly Gly Gly Cys Ala		
1269	9140	9145	9150
1270	Gly Gly Cys Cys Ala Gly Gly Ala Cys Thr Gly Cys Thr Thr Thr		
1271	9155	9160	9165
1272	Thr Thr Thr Ala Ala Thr Gly Cys Thr Cys Cys Ala Thr Thr		
1273	9170	9175	9180
1274	Thr Cys Ala Cys Ala Gly Ala Gly Ala Thr Ala Cys Cys Ala Cys		
1275	9185	9190	9195
1276	Cys Gly Ala Gly Ala Cys Thr Cys Gly Gly Ala Gly Gly Gly Gly Ala		9200
1277	9205	9210	9215
1278	Cys Ala Cys Gly Ala Thr Gly Ala Gly Cys Ala Cys Cys Ala Gly Gly		
1279	9220	9225	9230
1280	Cys Cys Cys Cys Ala Cys Cys Thr Thr Gly Thr Cys Cys Cys Cys		
1281	9235	9240	9245

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

1282 Thr Ala Gly Cys Ala Ala Ala Thr Thr Cys Ala Gly Gly Gly Thr Ala  
 1283 9250 9255 9260  
 1284 Cys Ala Gly Cys Thr Cys Cys Ala Cys Cys Thr Ala Gly Ala Ala Cys  
 1285 9265 9270 9275 9280  
 1286 Cys Ala Gly Gly Cys Thr Gly Cys Cys Cys Thr Cys Thr Ala Cys Thr  
 1287 9285 9290 9295  
 1288 Gly Thr Gly Cys Thr Cys Gly Thr Thr Cys Cys Thr Cys Ala Ala Gly  
 1289 9300 9305 9310  
 1290 Cys Ala Thr Thr Ala Thr Thr Ala Ala Gly Cys Ala Cys Cys Thr  
 1291 9315 9320 9325  
 1292 Ala Cys Thr Gly Gly Gly Thr Gly Cys Thr Gly Gly Thr Thr Cys  
 1293 9330 9335 9340  
 1294 Ala Cys Thr Gly Thr Cys Cys Thr Ala Gly Gly Ala Ala Ala  
 1295 9345 9350 9355 9360  
 1296 Cys Cys Ala Ala Gly Ala Gly Gly Thr Cys Cys Cys Cys Ala Gly  
 1297 9365 9370 9375  
 1298 Thr Cys Cys Thr Gly Gly Cys Cys Thr Cys Thr Gly Cys Cys Cys Gly  
 1299 9380 9385 9390  
 1300 Cys Cys Cys Cys Thr Gly Cys Thr Gly Cys Cys Cys Cys Ala Cys Cys  
 1301 9395 9400 9405  
 1302 Ala Cys Cys Thr Thr Cys Thr Gly Cys Ala Cys Ala Cys Ala Cys Ala  
 1303 9410 9415 9420  
 1304 Gly Cys Gly Gly Thr Gly Gly Gly Ala Gly Gly Cys Gly Gly Gly  
 1305 9425 9430 9435 9440  
 1306 Gly Ala Gly Gly Ala Gly Cys Ala Gly Cys Thr Gly Gly Gly Ala Cys  
 1307 9445 9450 9455  
 1308 Cys Cys Ala Gly Ala Ala Cys Thr Gly Ala Gly Cys Cys Thr Gly Gly  
 1309 9460 9465 9470  
 1310 Gly Ala Gly Gly Ala Thr Cys Cys Gly Ala Cys Ala Gly Ala Ala  
 1311 9475 9480 9485  
 1312 Ala Ala Gly Cys Thr Cys Ala Gly Gly Cys Gly Gly Gly Thr Cys  
 1313 9490 9495 9500  
 1314 Thr Thr Cys Thr Cys Cys Thr Thr Gly Thr Gly Cys Cys Cys Gly Gly  
 1315 9505 9510 9515 9520  
 1316 Gly Ala Thr Thr Gly Gly Gly Cys Thr Ala Thr Gly Cys Thr Gly Gly  
 1317 9525 9530 9535  
 1318 Gly Thr Ala Cys Cys Ala Cys Cys Ala Thr Gly Thr Ala Cys Thr Cys  
 1319 9540 9545 9550  
 1320 Ala Gly Gly Cys Ala Thr Gly Gly Thr Gly Gly Thr Thr Thr Thr  
 1321 9555 9560 9565  
 1322 Gly Ala Ala Cys Cys Cys Ala Thr Ala Ala Ala Cys Cys Ala Ala Ala  
 1323 9570 9575 9580  
 1324 Gly Gly Cys Cys Cys Thr Thr Gly Thr Cys Ala Thr Cys Ala Gly Cys  
 1325 9585 9590 9595 9600  
 1326 Thr Cys Thr Thr Ala Ala Cys Ala Ala Gly Thr Ala Thr Ala Thr Thr  
 1327 9605 9610 9615  
 1328 Thr Thr Gly Thr Ala Thr Thr Thr Ala Ala Thr Cys Thr Cys Thr  
 1329 9620 9625 9630  
 1330 Cys Thr Ala Ala Ala Cys Ala Thr Ala Thr Gly Ala Ala Gly Thr

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/778,963

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 TIME: 08:43:07

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\05172001\I778963.raw

1331	9635	9640	9645	
1332	Thr Thr Thr Ala Gly Gly Gly Cys Cys Cys Thr Ala Ala Gly Gly Ala			
1333	9650	9655	9660	
1334	Ala Cys Cys Thr Thr Ala Gly Thr Gly Ala Thr Cys Thr Thr Cys Thr			
1335	9665	9670	9675	9680
1336	Ala Thr Thr Gly Gly Gly Thr Cys Thr Thr Cys Thr Gly Ala Gly			
1337	9685	9690	9695	
1338	Gly Thr Thr Cys Ala Gly Ala Gly Gly Gly Thr Ala Ala Gly			
1339	9700	9705	9710	
1340	Thr Ala Ala Cys Thr Thr Cys Cys Thr Cys Cys Ala Gly Gly Thr Cys			
1341	9715	9720	9725	
1342	Ala Cys Ala Cys Ala Gly Cys Ala Ala Gly Thr Cys Thr Gly Thr Gly			
1343	9730	9735	9740	
1344	Gly Gly Thr Gly Gly Cys Ala Gly Ala Ala Gly Cys Ala Ala Gly Cys			
1345	9745	9750	9755	9760
1346	Thr Ala Gly Cys Gly Cys Thr Gly Gly Cys Ala Thr Thr Cys Ala			
1347	9765	9770	9775	
1348	Gly Thr Ala Cys Ala Thr Ala Cys Cys Ala Cys Gly Ala Thr Gly Thr			
1349	9780	9785	9790	
1350	Gly Cys Thr Cys Cys Cys Thr Cys Cys Thr Cys Thr Gly Ala Thr Gly			
1351	9795	9800	9805	
1352	Cys Thr Thr Gly Gly Cys Cys Cys Thr Gly Gly Gly Gly Cys Cys			
1353	9810	9815	9820	
1354	Thr Thr Cys Ala Gly Gly Cys Thr Thr Thr Gly Gly Gly Ala Cys			
1355	9825	9830	9835	9840
1356	Ala Thr Cys Thr Thr Gly Thr Cys Cys Thr Cys Ala Ala Cys Cys Cys			
1357	9845	9850	9855	
1358	Thr Cys Thr Cys Cys Cys Thr Ala Gly Ala Thr Cys Ala Gly Thr Cys			
1359	9860	9865	9870	
1360	Thr Gly Thr Gly Ala Gly Gly Thr Cys Cys Cys Thr Gly Thr Ala			
1361	9875	9880	9885	
1362	Gly Ala Thr Ala Thr Thr Gly Thr Gly Thr Ala Cys Ala Cys Cys Ala			
1363	9890	9895	9900	
1364	Thr Gly Cys Cys Cys Ala Thr Gly Thr Ala Thr Ala Thr Ala Cys Ala			
1365	9905	9910	9915	9920
1366	Ala Gly Thr Ala Cys Ala Cys Ala Gly Ala Thr Gly Thr Ala			
1367	9925	9930	9935	
1368	Cys Ala Cys Ala Cys Ala Gly Ala Thr Gly Thr Ala Cys Ala Cys Ala			
1369	9940	9945	9950	
1370	Thr Gly Cys Thr Cys Cys Ala Gly Cys Cys Cys Cys Ala Gly Cys Thr			
1371	9955	9960	9965	
1372	Cys Thr Gly Cys Ala Thr Ala Cys Cys Thr Gly Cys Ala Cys Cys Thr			
1373	9970	9975	9980	
1374	Gly Cys Ala Cys Cys Cys Cys Ala Gly Cys Cys Thr Thr Gly Gly Cys			
1375	9985	9990	9995	10000
1376	Cys Cys Cys Thr Gly Cys Cys Thr Gly Cys Gly Thr Cys Thr Gly Thr			
1377	10005	10010	10015	
1378	Gly Cys Thr Cys Ala Ala Ala Gly Cys Ala Gly Cys Ala Gly Cys Thr			
1379	10020	10025	10030	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

1380 Cys Cys Ala Ala Cys Cys Cys Thr Gly Cys Cys Thr Cys Thr Gly Thr  
1381 10035 10040 10045  
1382 Cys Cys Cys Cys Thr Thr Cys Cys Cys Ala Cys Cys Cys Ala Cys  
E--> 1383 10050 10055 10060 (1)  
1384 Thr Gly Cys Cys Thr Gly Ala Gly Cys Cys Thr Thr Cys Thr Gly Ala  
E--> 1385 0065 10070 10075 10080  
1386 Gly Cys Ala Gly Ala Cys Cys Ala Gly Gly Thr Ala Cys Cys Thr Thr  
1387 10085 10090 10095  
1388 Gly Gly Cys Thr Gly Cys Ala Cys Cys Gly Gly Thr Gly Thr Gly Thr  
1389 10100 10105 10110  
1390 Gly Gly Cys Cys Gly Cys Thr Cys Thr Cys Ala Cys Cys Cys Ala  
1391 10115 10120 10125  
1392 Gly Gly Cys Ala Cys Ala Gly Cys Cys Cys Gly Cys Cys Ala Cys  
E--> 1393 10130 10135 10140 (1)  
1394 Cys Ala Thr Gly Gly Ala Thr Cys Thr Cys Cys Gly Thr Gly Thr Ala  
E--> 1395 0145 10150 10155 10160  
1396 Cys Ala Cys Thr Ala Thr Cys Ala Ala Ala Ala Ala Gly Thr  
1397 10165 10170 10175  
1398 Gly Gly Gly Thr Thr Gly Thr Thr Ala Cys Ala Ala Ala Gly Cys  
1399 10180 10185 10190  
1400 Cys Gly Thr Gly Thr Cys Cys Thr Thr Gly Cys Cys Cys Ala Thr Gly  
1401 10195 10200 10205  
1402 Thr Gly Thr Ala Thr Thr Thr Thr Gly Thr Ala Thr Thr Thr  
E--> 1403 10210 10215 10220 (1)  
1404 Cys Cys Ala Ala Gly Ala Gly Gly Thr Gly Thr Gly Cys  
E--> 1405 0225 10230 10235 10240  
1406 Cys Cys Cys Thr Thr Cys Cys Ala Gly Ala Cys Cys Ala Ala Ala  
1407 10245 10250 10255  
1408 Gly Cys Thr Gly Gly Cys Cys Thr Thr Cys Cys Cys Thr Cys Cys  
1409 10260 10265 10270  
1410 Cys Ala Ala Ala Ala Thr Gly Cys Ala Cys Cys Thr Gly Cys Cys Gly  
1411 10275 10280 10285  
1412 Thr Gly Thr Ala Cys Cys Cys Thr Gly Gly Cys Cys Cys Thr Gly Ala  
E--> 1413 10290 10295 10300 (1)  
1414 Gly Gly Gly Thr Cys Ala Gly Cys Ala Cys Thr Gly Ala Gly Thr Cys  
E--> 1415 0305 10310 10315 10320  
1416 Cys Ala Cys Cys Thr Thr Cys Ala Ala Gly Thr Gly Thr Ala Ala Gly  
1417 10325 10330 10335  
1418 Thr Gly Thr Gly Gly Gly Ala Gly Ala Gly Gly Gly Gly Ala  
1419 10340 10345 10350  
1420 Thr Ala Ala Gly Thr Cys Cys Cys Cys Ala Gly Ala Thr Gly Gly  
1421 10355 10360 10365  
1422 Ala Ala Gly Gly Thr Gly Ala Thr Gly Cys Cys Cys Thr Cys Cys Thr  
E--> 1423 10370 10375 10380 (1)  
1424 Thr Cys Ala Gly Cys Cys Thr Gly Gly Cys Cys Cys Thr Cys Cys Thr  
E--> 1425 0385 10390 10395 10400  
1426 Gly Gly Gly Thr Cys Cys Thr Cys Cys Gly Gly Thr Gly Thr Gly  
1427 10405 10410 10415  
1428 Thr Gly Thr Ala Cys Cys Gly Ala Gly Gly Thr Gly Thr Cys Thr Gly

Misaligned amino acid numbering.

When you have 5 digits, double-space  
between the first 2 amino acids. This  
will allow the entire number to process  
correctly.

Thr Cys Ala  
10385

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

1429	10420	10425	10430
1430	Thr Gly Thr Cys Cys Ala Cys Ala Ala Ala Gly Ala Ala Gly Gly Gly		
1431	10435	10440	10445
1432	Gly Cys Cys Cys Cys Cys Gly Thr Gly Gly Ala Cys Cys Ala Thr Thr		
E--> 1433	10450	10455	10460
E--> 1434	Ala Gly Cys Thr Cys Cys Ala Gly Gly Ala Gly Ala Thr Cys Thr		
E--> 1435	0465	10470	10475
1436	Cys Cys Gly Thr Gly Thr Cys Thr Gly Ala Gly Thr Thr Cys Thr Thr		10480
1437	10485	10490	10495
1438	Thr Gly Thr Gly Ala Thr Thr Cys Cys Thr Gly Thr Ala Cys Ala Gly		
1439	10500	10505	10510
1440	Cys Ala Gly Cys Ala Ala Thr Thr Thr Cys Ala Cys Cys Gly Cys		
1441	10515	10520	10525
1442	Ala Gly Gly Gly Ala Cys Ala Gly Thr Thr Gly Gly Cys Ala Ala		
E--> 1443	10530	10535	10540
E--> 1444	Thr Cys Thr Cys Thr Gly Gly Ala Ala Ala Cys Cys Thr Thr Thr Thr		
E--> 1445	0545	10550	10555
1446	Cys Cys Ala Ala Gly Cys Cys Thr Gly Gly Gly Gly Cys Thr Gly Gly		10560
1447	10565	10570	10575
1448	Gly Gly Cys Thr Gly Cys Thr Ala Cys Thr Cys Thr Cys Ala Thr Cys		
1449	10580	10585	10590
1450	Thr Gly Gly Thr Gly Gly Thr Gly Gly Ala Gly Gly Cys Cys Ala		
1451	10595	10600	10605
1452	Gly Gly Gly Ala Cys Ala Cys Cys Ala Thr Thr Cys Ala Gly Thr Ala		
E--> 1453	10610	10615	10620
E--> 1454	Thr Cys Cys Thr Cys Cys Ala Ala Cys Gly Cys Ala Cys Ala Gly Gly		
E--> 1455	0625	10630	10635
1456	Ala Thr Gly Cys Cys Cys Cys Thr Cys Cys Ala Cys Cys Cys Cys		10640
1457	10645	10650	10655
1458	Ala Cys Cys Cys Cys Ala Cys Thr Gly Ala Gly Ala Ala Thr Thr Ala		
1459	10660	10665	10670
1460	Thr Cys Thr Gly Gly Cys Cys Thr Cys Ala Ala Ala Thr Gly Cys Cys		
1461	10675	10680	10685
1462	Ala Ala Gly Cys Gly Thr Gly Gly Cys Ala Gly Cys Cys Thr Thr		
E--> 1463	10690	10695	10700
1464	Ala Cys Thr Thr Ala Gly Ala Cys Thr Cys Ala Cys Cys Cys Ala		
E--> 1465	0705	10710	10715
1466	Gly Gly Gly Cys Thr Gly Gly Ala Cys Ala Cys Gly Cys Cys		10720
1467	10725	10730	10735
1468	Cys Cys Cys Ala Cys Cys Thr Gly Cys Gly Thr Gly Thr Gly Ala Thr		
1469	10740	10745	10750
1470	Gly Gly Ala Thr Thr Gly Thr Gly Gly Ala Cys Cys Ala Cys		
1471	10755	10760	10765
1472	Ala Thr Thr Cys Thr Gly Gly Ala Cys Gly Gly Ala Ala Cys Cys Cys		
E--> 1473	10770	10775	10780
1474	Ala Cys Ala Gly Cys Ala Thr Ala Ala Gly Cys Ala Cys Thr Cys Cys		
E--> 1475	0785	10790	10795
1476	Thr Gly Thr Gly Ala Ala Gly Thr Gly Ala Gly Ala Cys Ala Gly Gly		10800
1477	10805	10810	10815

misaligned  
amino  
acid numbering  
sec p. 27

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:07

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

1478 Ala Thr Gly Thr Gly Gly Thr Gly Ala Gly Gly Ala Thr Gly Gly  
1479 10820 10825 10830  
1480 Ala Ala Ala Gly Thr Gly Gly Ala Gly Gly Cys Thr Gly Ala Gly Gly  
1481 10835 10840 10845  
1482 Gly Ala Gly Ala Ala Gly Gly Thr Cys Thr Gly Gly Gly Cys Cys Cys  
E--> 1483 10850 10855 10860 1  
1484 Thr Gly Ala Cys Cys Ala Ala Cys Ala Cys Gly Ala Ala Thr Gly  
E--> 1485 10865 10870 10875 10880  
1486 Thr Gly Cys Cys Cys Cys Cys Thr Gly Gly Gly Ala Cys Thr Gly Ala  
1487 10885 10890 10895  
1488 Gly Ala Gly Gly Cys Thr Thr Cys Cys Cys Thr Gly Gly Gly Cys Ala  
1489 10900 10905 10910  
1490 Gly Ala Gly Gly Ala Ala Ala Gly Gly Ala Gly Gly Ala Ala Gly  
1491 10915 10920 10925  
1492 Thr Cys Ala Gly Thr Gly Ala Gly Gly Thr Ala Ala Ala Ala Thr Ala  
E--> 1493 10930 10935 10940 1  
1494 Cys Thr Cys Cys Cys Thr Gly Thr Gly Thr Gly Thr Thr Thr Ala  
E--> 1495 10945 10950 10955 10960  
1496 Cys Cys Cys Ala Gly Cys Gly Ala Gly Thr Cys Thr Cys Ala Cys Gly  
1497 10965 10970 10975  
1498 Cys Cys Ala Thr Cys Cys Thr Ala Thr Cys Ala Cys Cys Cys Ala Gly  
1499 10980 10985 10990  
1500 Cys Cys Cys Gly Ala Gly Gly Ala Ala Gly Cys Cys Cys Cys Ala  
1501 10995 11000 11005  
1502 Cys Thr Cys Ala Thr Gly Thr Thr Cys Ala Cys Cys Cys Cys Ala Thr  
E--> 1503 11010 11015 11020 1  
1504 Cys Thr Gly Ala Gly Cys Ala Thr Thr Thr Ala Gly Gly Cys Thr Cys  
E--> 1505 1025 11030 11035 11040  
1506 Ala Gly Ala Gly Ala Gly Cys Thr Cys Ala Ala Thr Ala Thr Cys Thr  
1507 11045 11050 11055  
1508 Thr Gly Thr Cys Cys Ala Ala Gly Ala Thr Gly Gly Cys Ala Cys Ala  
1509 11060 11065 11070  
1510 Gly Cys Thr Gly Gly Thr Gly Ala Ala Gly Thr Gly Gly Cys Ala Gly  
1511 11075 11080 11085  
1512 Ala Thr Cys Ala Gly Ala Gly Ala Thr Thr Cys Ala Ala Cys Ala Cys  
E--> 1513 11090 11095 11100 1  
1514 Cys Ala Gly Ala Gly Gly Cys Thr Gly Thr Cys Thr Gly Ala Thr Thr  
E--> 1515 1105 11110 11115 11120  
1516 Thr Cys Cys Gly Thr Cys Thr Gly Gly Cys Thr Gly Ala Ala Gly Ala  
1517 11125 11130 11135  
1518 Ala Ala Gly Ala Thr Thr Thr Gly Cys Ala Thr Cys Ala Gly Gly  
1519 11140 11145 11150  
1520 Gly Ala Gly Gly Thr Gly Gly Ala Ala Ala Cys Cys Ala Thr Cys Thr  
1521 11155 11160 11165  
1522 Gly Thr Gly Cys Thr Thr Thr Gly Ala Thr Cys Ala Gly Cys Ala  
E--> 1523 11170 11175 11180 1  
1524 Ala Ala Thr Gly Cys Cys Ala Cys Cys Ala Gly Cys Ala Gly Gly Ala  
E--> 1525 1185 11190 11195 11200  
1526 Thr Cys Ala Gly Gly Ala Gly Cys Cys Ala Gly Gly Cys Cys Ala

Same

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001

TIME: 08:43:07

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\05172001\I778963.raw

1527 11205

11210

11215

1528 Thr Ala Ala Ala Gly

11220

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/778,963

DATE: 05/17/2001  
TIME: 08:43:08

Input Set : A:\Seqlist.txt  
Output Set: N:\CRF3\05172001\I778963.raw

L:1383 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3  
M:332 Repeated in SeqNo=3